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NONFARM AGRICULTURAL EMPLOYMENT IN SOUTHWEST LOUISIANA--AREA
III--WITH IMPLICATIONS FOR DEVELOPING TRAINING PROGRAMS.

BY- MONDART, C.L., SR. AND OTHERS

LOUISIANA ST. UNIV., BATON ROUGE

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DESCRIPTORS- *OFF FARM AGRICULTURAL OCCUPATIONS, *EMPLOYMENT OPPORTUNITIES, *EDUCATIONAL NEEDS, *OCCUPATIONAL SURVEYS, *EMPLOYMENT QUALIFICATIONS, AGRICULTURAL SKILLS, OCCUPATIONAL CLUSTERS, LOUISIANA,

AS PART OF A STATEWIDE STUDY OF NONFARM AGRICULTURAL OCCUPATIONS IN LOUISIANA, A TOTAL OF 443 FIRMS AND AGENCIES IN 12 PARISHES (EXCLUDING TWO METROPOLITAN AREAS) WERE SURVEYED TO DETERMINE THE (1) NUMBER OF EMPLOYEES ACCORDING TO JOB TITLES, (2) AGRICULTURAL COMPETENCIES NEEDED, (3) CHARACTERISTICS AND REQUIREMENTS OF JOBS, AND (4) TRENDS IN OCCUPATIONAL OPPORTUNITIES. OF THE 6,889 EMPLOYEES, 3,088 IN 503 DIFFERENT JOB TITLES NEEDED AGRICULTURAL COMPETENCIES. AN ADDITIONAL 328 AGRICULTURAL EMPLOYEES WOULD BE NEEDED WITHIN 5 YEARS. THE OCCUPATIONAL FAMILIES HAVING THE LARGEST NUMBER OF WORKERS WERE (1) CROPS, FORESTRY, AND SOIL CONSERVATION, (2) FARM MACHINERY SALES AND SERVICE, (3) FARM SUPPLIES AND EQUIPMENT, AND (4) LIVESTOCK AND POULTRY. SALARIES WERE RELATED TO TRAINING, EXPERIENCE, AND RESPONSIBILITY. A MINIMUM OF A HIGH SCHOOL EDUCATION WAS REQUIRED FOR 88.6 PERCENT OF THE REPLACEMENT WORKERS, BUT NEARLY 15 PERCENT OF THE TOTAL AGRICULTURAL WORKERS WERE REQUIRED TO HAVE A COLLEGE DEGREE OR SOME COLLEGE TRAINING. FARM BACKGROUND WAS PREFERRED IN 51.7 PERCENT OF WORKER CASES. GENERALLY, ALL WORKERS ABOVE THE SEMISKILLED LEVEL OF EMPLOYMENT NEEDED A FAIRLY BROAD KNOWLEDGE OF AGRICULTURAL SUBJECT MATTER. IT WAS RECOMMENDED THAT TRAINING INCLUDE EXPERIENCES IN BASIC AGRICULTURAL PRODUCTION PROCESSES, IN THE SPECIALIZED KNOWLEDGE AND SKILL INVOLVED IN A JOB TITLE OR CLUSTER OF TITLES, AND AT THE PRE-JOB LEVEL UNDER PRACTICAL WORKING CONDITIONS. A BIBLIOGRAPHY, THE SURVEY INSTRUMENTS, AND A LIST OF JOB TITLES IN EIGHT OCCUPATIONAL FAMILIES ARE INCLUDED. OTHER PARTS OF THE STATEWIDE STUDY ARE AVAILABLE AS VT 004 782-VT 004 786. (JM)

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School of Vocational Education
College of Agriculture
Louisiana State University
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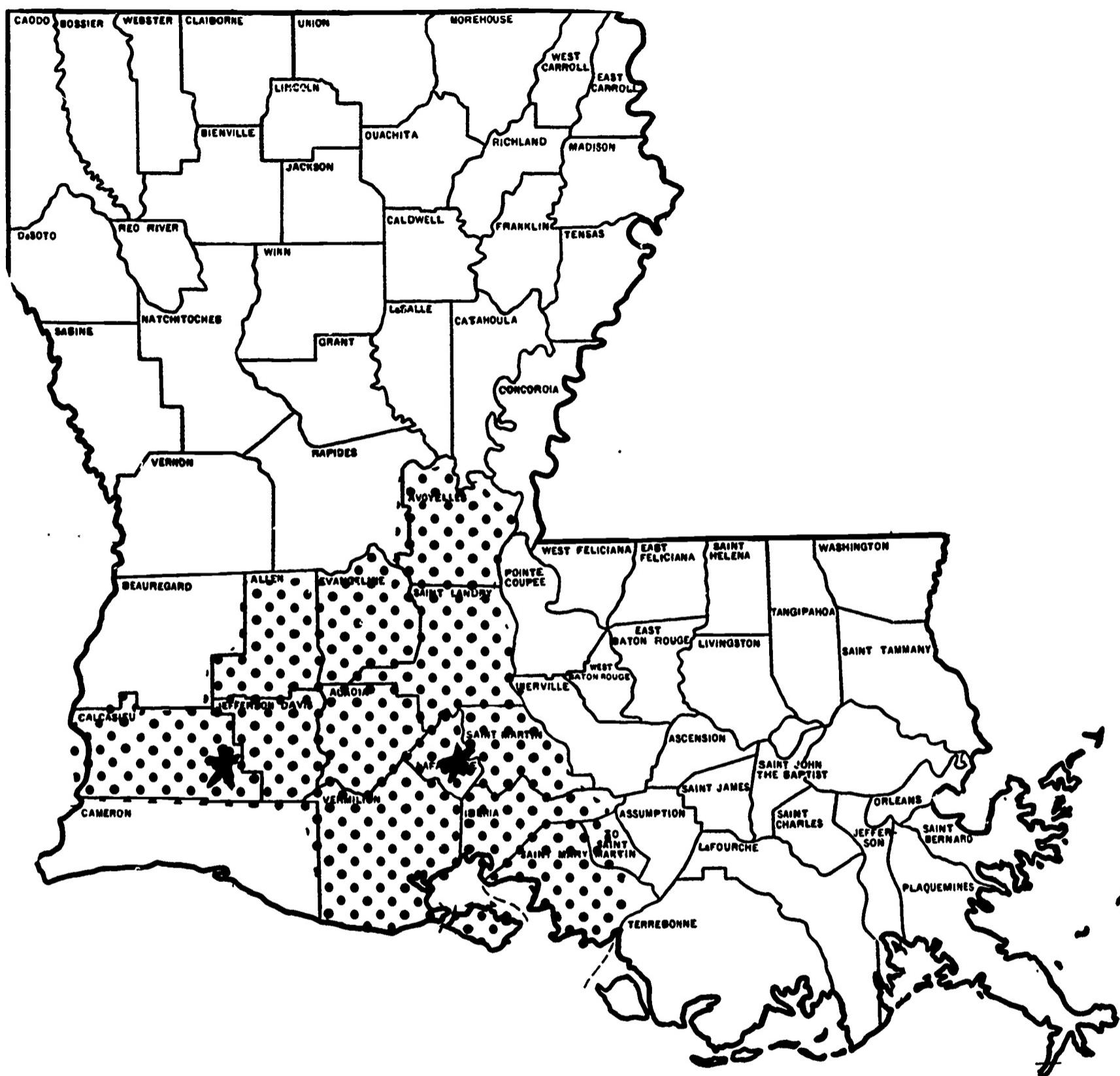
**Cooperative Research Project
OE 5-85-040**

by

**C. L. Mondart, Sr.
C. M. Curtis
L. Russell Sullivan**

**DEPARTMENT OF VOCATIONAL AGRICULTURAL EDUCATION.
SCHOOL OF VOCATIONAL EDUCATION
COLLEGE OF AGRICULTURE
LOUISIANA STATE UNIVERSITY
June, 1967**

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★ Lake Charles and Lafayette Areas are excluded from this report

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RESEARCH STAFF

C. L. Mondart, Dr., Professor, Director, School of Vocational Education
C. M. Curtis, Associate Professor, Project Director
Joy H. Dobbins, Research Associate
William Sanford Hyde, Research Associate
James C. Letlow, Research Associate
Dale Reed, Research Associate*
Lehman R. Sullivan, Research Associate
Alice D. Anders, Project Secretary

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**School of Vocational Education
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Vocational Education Act of 1963.**

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Special Consultants

- Dr. Alvin Bertrand, Professor of Rural Sociology, Department of Sociology, Louisiana State University.
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- Mr. Silas D. Garvin, Labor Market Analyst, Division of Employment Security, State of Louisiana.
- Mr. Joseph R. Gerace, Operations Analyst, Division of Employment Security, State of Louisiana.

Advisory Committee

- Dr. J. Norman Efferson, Dean, College of Agriculture, Louisiana State University.
- Dr. R. Howard Hanchey, Associate Dean, College of Agriculture, Louisiana State University.
- Dr. Fred H. Wiegmann, Head, Department of Agricultural Economics and Agribusiness, Louisiana State University.
- Dr. Alvin Bertrand, Professor of Rural Sociology, Department of Sociology, Louisiana State University.
- Mr. William E. Johnson, Assistant Superintendent for Vocational Education, Louisiana State Department of Education.
- Mr. Thomas S. Derveloy, Director Vocational Agricultural Education, Louisiana State Department of Education.
- Mr. T. S. Colvin, Supervisor Area I, Louisiana State Department of Education.
- Mr. Woodrow Lyles, Supervisor Area II, Louisiana State Department of Education.

Mr. Ivan Baker, Supervisor Area III, Louisiana State Department of Education.

Mr. James C. Simmons, Supervisor Area IV, Louisiana State Department of Education.

Mr. A. A. LeBlanc, Late Head, Department of Vocational Agricultural Education, University of Southwestern Louisiana.

Dr. John Mitchell, Head, Department of Vocational Agricultural Education, University of Southwestern Louisiana.

Dr. J. Y. Terry, Head, Department of Vocational Agricultural Education, Louisiana Polytechnic Institute.

Cooperating

The Louisiana State University Staff:

Dr. John A. Hunter, President.

Dr. Cecil G. Taylor, Chancellor.

Dr. J. Norman Efferson, Dean, College of Agriculture.

Dr. R. Howard Hanchey, Associate Dean, College of Agriculture.

Dr. J. C. Atherton, Professor, Vocational Agricultural Education.

Dr. James Hutchinson, Associate Professor, Vocational Agricultural Education.

Dr. Bill B. Townsend, Director, Computer Research Center.

Mr. Donald E. Simmons, Assistant to the Comptroller.

Mr. John D. Tiedeman, Accountant, Auditor's Office.

Miss Marion M. Comeaux, Administrative Assistant, Office of the President.

Mrs. Mary K. McMinn, Secretary, School of Vocational Education.

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INTRODUCTION

Among all the social institutions of the country today, an occupation is the most important. Occupations pursued by the nation's workers now support all other institutions, including the schools, the local, state and federal governments.

Man must work. That is certain as the sun. . . But he may work grudgingly or he may work gratefully; he may work as a man, or he may work as a machine. There is no work so rude that he may not exalt it; no work so impassive that he may not breathe a soul in it; no work so dull that he may not enliven it.

Giles

Transitions in occupations are taking place more rapidly today than any previous period in the nation's history. In relation to America's fast pace, a conservative analyst once said, "We are further removed from our great-grandparents than they were from Moses and the Pharaohs". Occupations are eliminated from the work world with the snap of a finger. Developments in science and technology are continually calling into service new vocations. The nation, because of these dynamic and fast changes, has developed common interests in coping with unemployment of youth, a most significant social problem.

Society is and has been experiencing significant shifts in employment needs and occupational opportunities for youth. For instance, production workers are decreasing, while the need for service workers continues to rise. Concurrently, all prospective workers must be better qualified; consequently, youth must not only know the fields of employment open to them, but they must have access to appropriate training programs.

Prospective workers from rural areas, especially those on the farm, have a special problem. They have long looked to the farm for an occupation or employment, a field of work now requiring fewer workers, both at the worker and operator levels. Undergirding this trend is the fact that "farming is a pacesetter" in the use of science and technology in production, causing fewer workers to progressively produce more on farms.

Equally significant is that fewer farmers with less workers have enjoyed an increasing amount of help from businesses and agencies organized off the farm to receive, process and market farm products, in addition to providing service with actual farm production. This segment of the total economy has expanded into a huge business complex, employing a large share of the nation's workers and offering employment each year to large numbers of youth interested and trained in agricultural subjects.

Until the passage of the Morse-Perkins Act in 1963, training programs in vocational agriculture at the secondary school level dealt first with the preparation of youth and adults for proficiency in farming occupations. Under provisions of the new legislation, agriculture is recognized as a much broader field of employment, authorizing new training programs to "open up" new occupations contained in the nonfarm sector of agriculture.

Both the student and the educator should know the agricultural occupations and the qualifications youth must acquire for job entry. A research program was undertaken at Louisiana State University in 1963 to identify the nonfarm agricultural businesses and agencies and the jobs they contain, along with worker qualifications. The study was planned in two stages:

1. A survey of the agricultural concerns in the seven metropolitan areas; and
2. A survey of the agricultural concerns in the rural towns of the state.

For the purposes of accomplishing Phase Two, the state was divided into four geographic areas, according to divisions employed by the State Department of Education to facilitate supervision of high schools having vocational agriculture programs.

This study covers Area III, the southwestern portion of the state.

Background Information of Area III

The southwest area of Louisiana, known as the "Cajun Country" and "Acadian Country" is very unique in character and historical significance. It has a picturesque type of history that no other section of the world can proclaim. Located in an area of prairie land and lazy bayous, Southwest Louisiana has developed one of the finest agricultural and industrial sectors in the world. The many recreational areas and preservatories make it one of the most beautiful spots in America.

This area was mostly inhabited by tribes of Attakapas, Chitimocha, Opelouse, Avoyelles, and Houma Indians before the coming of the white man. The Chitimocha Indian is the only tribe remaining and they are domiciled on a reservation in St. Mary's Parish. It is not definitely known when the first white settlers came to this section, but the Spaniards occupied the area in the 1760's. The first white settlers with noticeable population were

the Acadians who were displaced from their Nova Scotia homes by the English. The Acadians settled largely around the Lafayette area.

History shows that numerous grants of land formerly controlled by the Indians were made by the government during the late 1700's to exiled Acadians as well as to French, German and Spanish settlers. These groups laid the framework for a dynamic agriculture which is still prominent today.

In Southwest Louisiana, where French is still spoken in many circles, an old world charm and gracious way of life still exists. This section is the center of a large petroleum industry and is known as the "Golden Coast" of Louisiana.

The Southwest Louisiana area consists of twelve parishes and include two metropolitan centers, Lafayette and Lake Charles. The area is known to the world for its rice and sugar cane production. Other crops that are important are cotton, sweet potatoes, corn and soybeans. These are supplemented with beef cattle, dairying, swine, poultry and truck crops. The production of light horses, which has reached a relatively high peak, should not be excluded when considering agricultural production. Timber production is of major importance in the northern section of this area. Some of the wealthiest farmers in the world can be found in this "sugar-rice" sector of Louisiana.

Modern industry is firmly meshed with agriculture in all parishes. There is a keen awareness of the interdependence of industry and agriculture and the basic understanding is that the economic health of these twelve parishes is closely interwoven with the well being of the farm population.

According to the 1964 census, the total value of farm products sold was approximately 144 million dollars. A complex and diversified system of

nonfarm agricultural industries is required to receive these farm products and transform them into products that can be used by the consumer. Many persons are essential to accomplish this process. Nonfarm agricultural businesses and agencies are vital to the economy of this area and especially to the farmer if he is to get his goods sold and distributed. Agricultural businesses and agencies employ large numbers of workers needing skills and competencies in agricultural subjects.

A total of 133 public high schools are located within the twelve parish area, which includes 71 departments of vocational agricultural education. The previous objective of the vocational agriculture department has been to prepare youth for farming. Declining opportunities for youth to own and operate farms with more boys enrolled in vocational agriculture than can possibly farm has turned the vocational educators' attention to developing broader programs in which rural boys can make fuller use of their training and experiences in agriculture.

Purpose of the Study

The study of semi-urban and rural areas of southwest Louisiana is a segment of a statewide study of nonfarm agricultural businesses and professional organizations which employ people with agricultural background and knowledge.

The primary purpose of the study in rural areas and towns was to identify nonfarm agricultural businesses and professional organizations having one or more job titles requiring knowledge or skill in agricultural subjects. Specific job qualifications, including the training needed in agriculture, associated with job entry were also identified.

Justification for this study is to be found with agricultural educators who need new training programs to meet the challenge of tomorrow's

dynamic agriculture. The study was designed to provide those engaged in education with a knowledge of the present and forthcoming agricultural occupations, other than farming and ranching, for which training in agricultural sciences and business should be made available in public schools.

For the purpose of this research, an occupation other than farming or ranching, refers to one for which employees need agricultural competencies in one or more of the specialized areas of animal and plant science, agricultural business and agricultural mechanics.

The objectives of this study were:

1. To determine the number of employees in each and all agricultural businesses and organizations in the southwest part of Louisiana according to job titles within occupational families and levels of employment.
2. To determine agricultural competencies needed for job entry and advancement.
3. To determine special characteristics and requirements of all job titles such as salary, age of entry, required formal education and experiences, residential background, legal restrictions and union regulations, and a description of work to be done by job title and level of employment.
4. To predict trends in the occupational opportunities in nonfarm agriculture.

Procedure

Nonfarm agricultural businesses and organizations within a 12 parish area of southwest Louisiana were surveyed, except for the metropolitan centers of Lafayette and Lake Charles. These Parishes were: Allen, Acadia, Avoyelles, Calcasieu, Evangeline, Iberia, Jefferson Davis, Lafayette, St. Landry, St. Martin, St. Mary, and Vermilion. These surveys included businesses and agencies engaged in handling farm products and/or providing agricultural services and excluded those firms which stated that agricultural training and skill were not needed for any of their employees.

A comprehensive list of agricultural businesses and agencies was developed by local agricultural instructors with the help of the staff of the Vocational Agricultural Education Department of Louisiana State University.

The National Vocational Act of 1963 (P. L. 88-210) justified the survey by placing within the realm of vocational agriculture provisions for offering training programs for agricultural occupations other than farming or ranching. The task of discovering and identifying these particular jobs and competencies needed was the responsibility of the vocational agriculture teacher with the aid of research associates from the Department of Vocational Agricultural Education, Louisiana State University.

The following procedure was used:

1. The U. S. Department of Health, Education and Welfare granted funds (Project OE 5-85-040) to the Louisiana State University with which to conduct the study in rural nonfarm areas of Louisiana not surveyed in the previous metropolitan study in 1965.
2. A schedule* with a few minor revisions previously developed by the vocational educators of Louisiana State University was used in procuring information.
3. Extension classes developed by the Vocational Agricultural Education Department of Louisiana State University were organized for the purpose of introducing survey procedures to the local agriculture teachers.
4. Four Research Associates, formerly vocational agriculture teachers, were employed by the university to direct and assist the local agriculture teachers in interviewing and completing survey forms on agricultural businesses and agencies in their respective areas.
5. The interviewers, vocational agriculture teachers and research associates from the university, made arrangements by telephone or personal visitation for the survey of each business establishment selected.

* See Appendix A

6. Information gained from the interview with a firm's representative was recorded on the survey form.
7. Survey information was arranged for computer processing by the research staff and sent to the Computer Center at Louisiana State University for programing.
8. The research associates processed, edited, and placed the data in tabular form for presentation and interpretation.

Treatment of Survey Information

In order to present and interpret survey information on 443 firms in the southwest Louisiana Area, data were organized under three general categories, namely: (1) occupational families, (2) classification of job titles into levels of employment and training required in agricultural subjects, and (3) special requirements for job entry.

Occupational families used in this study were patterned after those adopted nationally. These families are:

Farm Machinery Sales & Service
Farm Supplies & Equipment
Livestock & Poultry
Crops, Forestry & Soil Conservation
Ornamental Horticulture
Wildlife & Recreation
Farm Service
Agricultural Service

The number of employees with training in agricultural subjects was determined for each job title in all eight occupational families. Descriptive information of each job title within each category or family identified the level of employment. The levels of employment used in this study are: Professional, Technical, Managerial, Supervisory, Sales, Office, Skilled, Semiskilled, and Unskilled.

In each occupational family and level of employment, data were collected and tabulated indicating; average age of job entry, median monthly

salary or wage, educational levels associated with job entry, residential background and farm experience preferred, and agricultural subject matter areas in which employees must be trained, and continuing educational requirements. Agricultural competencies were tabulated under four broad areas: (1) Animal Science, (2) Plant Science, (3) Agricultural Business Management and Marketing, and (4) Farm Mechanics and Automation.

These data serve as tools to determine specialized training needs and will provide secondary school guidance counselors and teachers with information that may be helpful in guiding students toward vocational objectives.

PRESENTATION AND ANALYSIS OF SURVEY INFORMATION

Occupational Families

The many firms and agencies surveyed were grouped according to occupational families. A total of 443 different firms and agencies were included in the southwest Louisiana sector survey. Each family or grouping offers a wide range of occupations. Specific jobs contained within a family grouping may require similar and yet different skills and abilities, depending upon the level of employment and the work to be done. The occupational family, Farm Supplies and Equipment, contained more firms and agencies than any other family, followed by Agricultural Service.

A complete list of the types of firms in each occupational family follows:

I. Farm Machinery Sales & Service

Farm Machine and Equipment Dealer
Automation Equipment Company
Farm Implement Company
Farm Implement Manufacturer
Truck-Auto Company
Contractors, Equipment Company

II. Farm Supplies & Equipment

Hardware Store
Fence Company
Feed and Seed Store
Louisiana Agricultural Cooperative
Building Supply Store
Fertilizer Company
Garden Center
Lumber Company
Agricultural Chemical Dealer
Farm Store
Wholesale Distributor
Veterinarian Supply Store

II. Farm Supplies & Equipment (continued)

General Merchandise Company
Seed Company
Farm Cooperative
Butane Supply Company
Gas and Oil Company
Farm Supply
Tire Service Company
Bag Manufacturer
Dairy Farm Equipment Dealer

III. Livestock & Poultry

Slaughter House
Butcher Shop
Meat Market
Milk Distributorship
Creamery
Dairy Products Company
Wholesale Meat Distributor
Livestock Auction Barn
Poultry Processing Company
Grocery Store
Hatchery
Stockyard
Dairy Products Company
Poultry and Egg Company
Packing Company
Louisiana State Milk Testing Division
Cattle Dealer Company
Food Preservation Center
Hide Company

IV. Crops, Forestry & Soil Conservation

Cannery
Cotton Compress
Cotton Gin
Rice Dryer
Fruit and Vegetable Company
Sawmill (Lumber Company)
Logging Company
Grain Company
Tomato Company
Planting Company
Irrigation Company
Sugar Mill
Sugar Cooperative
Rice Mill
Forestry Consultant Company

IV. Crops, Forestry & Soil Conservation (continued)

Plywood Mill
Syrup Mill
Tree Surgeon Company
Seed and Oil Mill
Vegetable Shippers
Produce Company

V. Ornamental Horticulture

Garden Center
Nursery
Florist
Landscape Company
Florist Gift Shop
Wholesale Florist
Greenhouse

VI. Wildlife & Recreation

Golf Course
Park
Country Club
Louisiana Wildlife and Fisheries Commission

VII. Farm Service

Welding Company
Machine Shop
Pest Exterminating Company
Artificial Breeding Association
Credit Association
Farmers Home Administration
Realty Company
Aero Farm Service
Water Well Company
Warehouse Company
Iron Works
Auto Repair Shop
Farm Bureau
Blacksmith
Land Company
Locker Plant
Airplane Service
Electric Power Supplier
Canal Company
Farm Equipment Repair
Custom Feed Mill

VIII. Agricultural Service

Animal Hospital
Veterinarian
Agricultural Stabilization and Conservation
Agricultural Extension Service
Soil Conservation Service
Vocational Agriculture Teacher
U. S. Department of Agriculture
Bank
Federal Land Bank Association
Experiment Station

All Occupational families were well represented, with the exception of Wildlife and Recreation, among the 443 agricultural businesses and agencies included in the survey. There is a concentration of businesses dealing with farm supplies, equipment and service, a trend evident throughout the country.

The groupings of the agricultural businesses and agencies in the southwest rural-nonfarm Area as to the occupational family are presented in Table I.

TABLE I
NUMBER OF AGRICULTURAL BUSINESSES, INDUSTRIES, AND AGENCIES
GROUPED BY OCCUPATIONAL FAMILY, 1965

Occupational Family	Number	Per Cent
Farm Machinery Sales & Service	53	11.9
Farm Supplies & Equipment	88	19.9
Livestock & Poultry	62	14.0
Crops, Forestry & Soil Conservation	78	17.6
Ornamental Horticulture	21	4.7
Wildlife & Recreation	3	.7
Farm Service	52	11.8
Agricultural Service	86	19.4
Total	443	100.0

More than 56 per cent of the establishments surveyed were classified under three occupational families; Farm Supplies and Equipment, Agricultural Service, and Crops, Forestry and Soil Conservation. The greatest concentration was in Farm Supplies and Equipment, a trend evident in other studies.

The rank of occupational families according to number of businesses and agencies was as follows:

Farm Supplies & Equipment
Agricultural Service
Crops, Forestry & Soil Conservation
Livestock & Poultry
Farm Machinery Sales & Service
Farm Service
Ornamental Horticulture
Wildlife & Recreation

Firms in Ornamental Horticulture and Wildlife and Recreation were found in the fewest number. It was found that more opportunities in these two families existed in the metropolitan areas than in the rural and semi-urban areas.

Agricultural Service was ranked high, because Southwest Louisiana is primarily an agricultural area.

Number Employed in Nonfarm Agriculture

The number of workers employed in the 443 firms and agencies surveyed, together with those having competencies in agriculture, is shown by occupational family in Table II.

A total of 6,889 workers was found in the 443 agricultural businesses and organizations in this study. Of the total number, 3,088 or 44.8 per cent were required to have knowledge and skill in agricultural subjects as

TABLE II

NUMBER OF PERSONS EMPLOYED IN AGRICULTURAL BUSINESSES, INDUSTRIES
AND AGENCIES, AND NUMBER OF EMPLOYEES NEEDING AGRICULTURAL
COMPETENCIES, BY OCCUPATIONAL FAMILY

Occupational Family	Total Number of Employees	Current Employment	Employees Needing Agricultural Competencies		
			Per Cent Current Employees Needing Agri. Competencies	Expected Employment	Per Cent Increase Five Years Hence
Farm Machinery Sales & Service	808	492	60.9	616	25.5
Farm Supplies & Equipment	668	480	71.9	551	14.8
Livestock & Poultry	991	431	43.5	455	5.8
Crops, Forestry & Soil Conservation	3,304	992	30.0	1,033	4.1
Ornamental Horticulture	75	68	92.0	76	11.8
Wildlife & Recreation	23	14	60.9	17	21.4
Farm Service	393	265	67.7	298	12.5
Agricultural Service	627	346	55.2	370	6.9
Total	6,889	3,088	44.8	3,416	10.6

a job requisite. This number should show an increase of 10.6 per cent, or to a total number of 3,416, during the next five years.

When ranked according to the number of employees, and presumable economic importance in relation to numbers employed, the occupational families placed as follows:

Crops, Forestry & Soil Conservation
Livestock & Poultry
Farm Machinery Sales & Service
Farm Supplies & Equipment
Agricultural Service
Farm Service
Ornamental Horticulture
Wildlife & Recreation

This phase of the study revealed that 47 per cent of the total number of employees in the firms interviewed was employed in the occupational family of Crops, Forestry and Soil Conservation.

This family also contained the largest number of employees using knowledge and skills in agricultural subjects. It seems significant to note that 30 per cent of the total workers have agricultural competencies. This figure is somewhat higher than indicated in other studies.

Ranking the occupational families according to numbers of employees using knowledge and skill in agricultural subjects is given below:

Crops, Forestry & Soil Conservation
Farm Machinery Sales & Service
Farm Supplies & Equipment
Livestock & Poultry
Agricultural Service
Farm Service
Ornamental Horticulture
Wildlife & Recreation

Ornamental Horticulture workers were expected by and large to have agricultural training. It was indicated that 68 or 90.6 per cent of the

total number needed agricultural competencies as a job requisite, the largest per cent indicated for any family.

All families were expected to grow, adding 328 or a 10.6 per cent increase in agriculturally competent workers over the next five years. Farm Machinery Sales and Service indicated the largest per cent increase, with 124 or 25.2 per cent additional agriculturally trained persons needed.

The growth in employment carries with it an indication of increased occupational opportunities for youth trained in agricultural subjects.

Job Titles by Occupational Families

The 3,088 workers having agricultural competencies in 443 businesses and agencies held 503 job titles. These Job titles ranged from laborers to persons with professional status. These were not necessarily different job titles except as they apply to a particular firm involving work peculiar to it. It was noted from the survey instrument that job titles in Management appeared in numerous instances in almost identical form; yet different agricultural knowledge and skills were needed in each family because of the nature of the service performed.

Crops, Forestry and Soil Conservation held the most job titles as well as the largest number of workers using agricultural competencies. Occupational families of Crops, Forestry and Soil Conservation, Agricultural Service and Farm Supplies and Equipment contained approximately 60 per cent of all job titles. A ranking of families according to number of job titles shows their relative position.

TABLE III

NUMBER OF JOB TITLES IN AGRICULTURAL OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES

<u>Occupational Family</u>	<u>Number of Job Titles</u>	<u>Number of Job Titles Five Years Hence</u>	<u>Per Cent Job Title Increase Five Years Hence</u>
Farm Machinery Sales & Service	55	69	25.4
Farm Supplies & Equipment	77	91	18.1
Livestock & Poultry	71	75	5.6
Crops, Forestry & Soil Conservation	131	138	5.3
Ornamental Horticulture	20	24	20.0
Wildlife & Recreation	6	6	0.0
Farm Service	54	60	11.1
Agricultural Service	89	97	8.9
Total	503	560	11.3

Crops, Forestry & Soil Conservation	131
Agricultural Service	89
Farm Supplies & Equipment	77
Livestock & Poultry	71
Farm Machinery Sales & Service	55
Farm Service	54
Ornamental Horticulture	20
Wildlife & Recreation	6

All of the families, except Wildlife and Recreation, were expected to grow and increase in the number of job titles, adding 57 job titles over the next five years. The occupational family Farm Machinery Sales and Service showed the largest projected increase, adding 25.4 per cent increase during the next five year period.

It is quite evident that the agricultural complex of Southwest Louisiana contains many and varied specific jobs. It can be assumed that developing realistic programs designed to train persons for these jobs is a great task but is one that must be attempted if youth are to become successfully employed in them.

Levels of Employment in Nonfarm Agriculture

A classification of all workers found with agricultural training is shown in Table IV, according to levels of employment in the various occupational families.

A listing of those employed at the various job levels illustrates the levels of employment offering the most opportunity to young people. The following is a ranking of the employment levels according to the number of workers at each level in all occupational families.

LEVEL OF EMPLOYMENT	NUMBER
Semiskilled	774
Skilled	669
Management	570
Sales	250
Office	212
Unskilled	209
Technical	140
Professional	136
Supervisory	128

TABLE IV

TOTAL EMPLOYEES WITH AGRICULTURAL TRAINING BY LEVELS OF EMPLOYMENT IN OCCUPATIONAL FAMILIES

Occupational Family	Prof.	Tech.	Levels of Employment						Per Cent	
			Man- agerial	Super- visory	Sales	Office	Semi-skilled	Un-skilled		
Farm Machinery Sales & Service	7	0	100	25	72	33	206	49	0	492 16.0
Farm Supplies & Equipment	1	0	141	13	71	28	35	139	52	480 15.5
Livestock & Poultry	0	12	76	11	48	37	90	157	0	431 14.0
Crops, Forestry & Soil Conservation	7	46	153	41	49	38	202	353	103	992 32.1
Ornamental Horticulture	1	1	20	2	3	1	14	6	20	68 2.2
Wildlife & Recreation	6	0	0	4	0	0	0	1	3	14 .5
Farm Service	1	41	55	13	3	21	72	58	1	265 8.5
Agricultural Service	110	28	31	25	7	54	50	11	30	346 11.2
Total	136	140	570	128	250	212	669	774	209	3,088 100.0
Per Cent	4.4	4.5	18.5	4.1	8.0	6.9	21.7	25.1	6.8	100.0

Approximately 47 per cent of the total workers needing agricultural competencies were found in the skilled and semiskilled levels of employment. Only 209, or 6.7 per cent, of the total workers were classified unskilled, although all of those reported were required to have some working knowledge of agricultural subjects.

Employees at the professional level were limited largely to the Agricultural Service family. More than 80 per cent of total workers at the Professional level were in this family. The Agricultural Service family requires a large proportion of college graduates trained in the broad field of agriculture. Technical workers were found in the Livestock and Poultry, Crops, Forestry and Soil Conservation, Farm Service and Agricultural Service families. More than 62 per cent of the technical workers were found in the Farm Service and Crops, Forestry and Soil Conservation families. Technical worker level is a relatively recent discovery in the field of Agriculture and offers new opportunities for agriculturally trained youth. It is of general belief that more technical workers will be needed in the future; this being substantiated by the study, revealing that one or more jobs of the Technical level were needed for each professional worker.

Management and Supervisory levels were found to be of significant importance in the firms surveyed. Almost 23 per cent of the workers needing agricultural competencies were found in these two levels. Workers in these levels must possess a broader knowledge of all agricultural subjects and the ability to use it.

All businesses employed some type of salesmen who must be familiar with agricultural subjects. Many businesses depend upon the ability of the salesman to meet the farmer and "talk his language," in order to prosper

and grow. Many of the salesmen were required to have college training and/or have considerable agricultural experience.

The number of office workers needing agricultural competencies was rather unexpected, but appeared to be of significance when the office personnel came in contact with farmers. Office personnel in many instances are required to communicate with farmers and agriculturally trained persons.

Entry into the Professional and Managerial levels usually require training beyond the high school level, typically a college degree. Many job titles in the Sales, Technical and Supervisory levels require higher education and training, some of them even requiring college degrees in agriculture.

Job Entry Age For Nonfarm Agricultural Employees

Age of all employees with agricultural competencies in the 443 establishments was obtained by level of employment for each occupational family. Emphasis was given to minimum and maximum age for job entry in addition to employee age at the time of the survey.

Tables V-1 through V-8 show the information on ages by occupational families and level of employment.

Very little variation was found among the ages of all employees with agricultural training at the different levels of employment. From 32 to 39 was the range in ages, with an overall average approximating 35 years. Managerial and Supervisory levels of employment required more mature individuals than did the others.

The average age employers considered appropriate for job entry was found to range from 22 to 26 years with an average of 24 years at all job levels.

TABLE V-1

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

FARM MACHINERY SALES AND SERVICE

<u>Level of Employment</u>	<u>Present</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Number of Job Titles</u>
Professional	33	25	47	7
Technical	0	0	0	0
Managerial	39	28	51	100
Supervisory	40	29	52	25
Sales	38	23	54	72
Office	34	21	50	33
Skilled	35	22	49	206
Semiskilled	32	20	47	49
Unskilled	0	0	0	0

TABLE V-2

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

FARM SUPPLIES AND EQUIPMENT

<u>Level of Employment</u>	<u>Present</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Number of Job Titles</u>
Professional	31	21	45	1
Technical	0	0	0	0
Managerial	39	25	50	141
Supervisory	34	25	48	13
Sales	34	22	49	71
Office	36	21	48	28
Skilled	35	21	44	35
Semiskilled	33	21	48	139
Unskilled	33	20	46	52

TABLE V-3

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

LIVESTOCK AND POULTRY

<u>Level of Employment</u>	<u>Present</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Number of Job Titles</u>
Professional	0	0	0	0
Technical	38	25	55	13
Managerial	37	24	49	75
Supervisory	32	27	50	11
Sales	34	21	49	48
Office	35	21	50	37
Skilled	34	20	45	90
Semiskilled	31	20	46	157
Unskilled	0	0	0	0

TABLE V-4

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

CROPS, FORESTRY AND SOIL CONSERVATION

<u>Level of Employment</u>	<u>Present</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Number of Job Titles</u>
Professional	34	23	46	7
Technical	40	26	49	46
Managerial	39	27	50	153
Supervisory	41	27	50	41
Sales	37	25	49	49
Office	36	23	51	38
Skilled	38	23	51	202
Semiskilled	37	21	52	353
Unskilled	40	25	54	103

TABLE V-5

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

ORNAMENTAL HORTICULTURE

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	30	22	40	
Technical	25	18	45	1
Managerial	37	25	48	1
Supervisory	38	23	54	20
Sales	38	23	48	2
Office	35	25	45	3
Skilled	32	20	44	1
Semiskilled	33	19	45	14
Unskilled	30	19	46	6
				20

TABLE V-6

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

WILDLIFE AND RECREATION

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	35	24	50	6
Technical	0	0	0	0
Managerial	0	0	0	0
Supervisory	33	23	60	4
Sales	0	0	0	0
Office	0	0	0	0
Skilled	0	0	0	0
Semiskilled	35	24	55	1
Unskilled	40	18	50	3

TABLE V-7

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

FARM SERVICE

<u>Level of Employment</u>	<u>Present</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Number of Job Titles</u>
Professional	22	22	40	1
Technical	36	24	46	41
Managerial	39	26	49	55
Supervisory	40	26	46	13
Sales	31	22	48	3
Office	36	22	49	21
Skilled	34	22	47	72
Semiskilled	31	20	46	58
Unskilled	30	18	45	1

TABLE V-8

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

AGRICULTURAL SERVICE

<u>Level of Employment</u>	<u>Present</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Number of Job Titles</u>
Professional	38	24	51	110
Technical	36	22	48	28
Managerial	40	24	51	31
Supervisory	40	26	49	25
Sales	38	23	53	7
Office	36	21	51	54
Skilled	30	19	49	50
Semiskilled	31	22	49	11
Unskilled	35	22	50	30

Managerial and Supervisory positions were occupied by older persons thereby supporting the statements by employers that considerable experience and training was necessary before individuals would be hired for these levels. The average age of 24 years for job entry brings into focus a critical time lag between high school graduation and employment and places emphasis on the readiness of high school youth for job placement. Each family and each level of employment required prior training and experience before job entry. This problem is of immediate concern to educators and employers.

Maximum age for first employment in the businesses and agencies studied was found to range from 44 through 50. Most of the employers felt that an employee should serve at least 15-20 years before retirement. It was noted that a high entering age of 50 existed for salesmen which possibly indicates that salesmen usually derive most of their income from their ability to sell goods and products and age might not enter into the picture.

Salaries of Workers Employed in Nonfarm Agriculture

Median monthly salaries of employees in the nonfarm agricultural occupations of the Southwest Louisiana rural nonfarm area were calculated for each occupational family according to levels of employment. The schedule used provided for salary ranges, having an upper limit of \$700 plus; thus, where this figure is shown it indicates a minimum with tenure rather than the designation "maximum" shown in the tables. Tables VI-1 through VI-8 show median monthly salaries under categories Beginning, Present, and Maximum.

Significant differences in salaries were reported in each occupational family according to the level of employment. Employees were compensated according to education, training, experience and responsibility--a pattern evident in all families.

TABLE VI-1

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM MACHINERY SALES AND SERVICE

<u>Level of Employment</u>	<u>Median Monthly Salary</u>		
	<u>Beginning</u>	<u>Present</u>	<u>Maximum</u>
Professional	\$476.00	\$539.00	\$701.00
Technical	.00	.00	.00
Managerial	435.00	554.00	660.00
Supervisory	376.00	445.00	545.00
Sales	339.00	426.00	539.00
Office	234.00	305.00	376.00
Skilled	278.00	364.00	439.00
Semiskilled	224.00	265.00	297.00
Unskilled	.00	.00	.00

TABLE VI-2

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM SUPPLIES AND EQUIPMENT

<u>Level of Employment</u>	<u>Median Monthly Salary</u>		
	<u>Beginning</u>	<u>Present</u>	<u>Maximum</u>
Professional	\$301.00	\$351.00	\$401.00
Technical	.00	.00	.00
Managerial	348.00	445.00	536.00
Supervisory	350.00	400.00	451.00
Sales	232.00	291.00	344.00
Office	239.00	296.00	330.00
Skilled	264.00	318.00	368.00
Semiskilled	226.00	268.00	291.00
Unskilled	211.00	234.00	281.00

TABLE VI-3

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

LIVESTOCK AND POULTRY

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$.00	\$.00	\$.00
Technical	364.00	426.00	489.00
Managerial	329.00	426.00	486.00
Supervisory	476.00	525.00	550.00
Sales	259.00	318.00	381.00
Office	210.00	269.00	314.00
Skilled	246.00	301.00	351.00
Semiskilled	224.00	251.00	301.00
Unskilled	.00	.00	.00

TABLE VI-4

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

CROPS, FORESTRY AND SOIL CONSERVATION

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$501.00	\$651.00	\$701.00
Technical	401.00	464.00	510.00
Managerial	385.00	473.00	543.00
Supervisory	414.00	467.00	476.00
Sales	347.00	439.00	516.00
Office	297.00	347.00	392.00
Skilled	311.00	354.00	395.00
Semiskilled	239.00	276.00	326.00
Unskilled	186.00	226.00	251.00

TABLE VI-5

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

ORNAMENTAL HORTICULTURE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$326.00	\$476.00	\$576.00
Technical	200.00	201.00	201.00
Managerial	376.00	501.00	601.00
Supervisory	251.00	351.00	501.00
Sales	175.00	239.00	326.00
Office	226.00	226.00	226.00
Skilled	183.00	241.00	291.00
Semiskilled	188.00	239.00	289.00
Unskilled	180.00	215.00	234.00

TABLE VI-6

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

WILDLIFE AND RECREATION

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$451.00	\$601.00	\$701.00
Technical	.00	.00	.00
Managerial	.00	.00	.00
Supervisory	251.00	351.00	450.00
Sales	.00	.00	.00
Office	.00	.00	.00
Skilled	.00	.00	.00
Semiskilled	376.00	376.00	426.00
Unskilled	175.00	175.00	175.00

TABLE VI-7

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM SERVICE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$426.00	\$476.00	\$526.00
Technical	439.00	626.00	701.00
Managerial	407.00	511.00	594.00
Supervisory	376.00	443.00	626.00
Sales	276.00	351.00	451.00
Office	276.00	326.00	456.00
Skilled	287.00	364.00	432.00
Semiskilled	235.00	296.00	346.00
Unskilled	226.00	276.00	376.00

TABLE VI-8

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

AGRICULTURAL SERVICE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$496.00	\$679.00	\$701.00
Technical	339.00	443.00	576.00
Managerial	434.00	564.00	651.00
Supervisory	518.00	584.00	651.00
Sales	376.00	451.00	551.00
Office	320.00	404.00	448.00
Skilled	276.00	351.00	376.00
Semiskilled	181.00	232.00	271.00
Unskilled	192.00	239.00	288.00

The occupational families varied in pay scales for the several levels, yet generally Professional, Managerial and Supervisory levels were at the top of the scale with Unskilled at the bottom.

Maximum salaries appear to be normal in character as the worker secures more experience and advances in years of service. Those individuals employed in the Unskilled and Semiskilled levels of employment not only were employed at lower beginning salaries, but did not make as much progress in improving their salaries at the maximum level. It was noted that only a range of approximately \$60 existed between the beginning and maximum salary for the Unskilled worker, whereas, a \$200 range from beginning to maximum salaries was found for occupations in the upper levels.

It would be noted that across the board in all eight of the occupational families, the beginning median salary for Professional workers was \$425 a month, the maximum median salary was \$615 per month, somewhat lower than shown in some previous studies. Salary increases usually come with longevity in this level of employment.

Relatively few technicians were reported in this survey. However, five of eight families revealed employees in this level of employment. Professional workers were found in all occupational families except Crops, Forestry and Soil Conservation. Managerial employees were reported in every family with the exception of Wildlife and Recreation, while supervisory positions were included in each of the occupational families.

As a generalization, alert young men start at the lower levels and advance to higher levels through job experience and on-the-job training.

Educational Level Desired of Persons Entering Nonfarm Agricultural Occupations

Data in Table VII indicate educational levels desired of workers entering nonfarm agricultural occupations. These data are analyzed for each occupational family by the number of employees desired at each educational level.

Data reveal that most firms and agencies are not interested in hiring employees with less than a high school education. In fact, 88.6 per cent of all employees at the various levels of employment in all occupational families must have a high school education, or education beyond this level. Most of the 8.8 per cent of employees needing less than a high school education, and the 2.6 per cent with no preference, were found in jobs in the Unskilled level of employment. Nearly 88 per cent of the jobs requiring "no preference" as to educational status were found in the occupational family of Crops, Forestry and Soil Conservation. Over 72 per cent of all jobs classified as not requiring a high school education, or no preference, were in the families of Crops, Forestry and Soil Conservation and Livestock and Poultry.

Agricultural Service, followed by Ornamental Horticulture, and Farm Service led all families in educational requirements for beginning workers. Only small percentages of their employees were placed in the group having less than a high school education. Wildlife and Recreation followed by Agricultural Service showed the highest per cent, 42.9 per cent and 25.7 respectively, of their employees needing a college degree. Agricultural Service and Crops, Forestry and Soil Conservation, reported 120 or 63.4 per cent of all persons required to have a college degree. All families reported to have a need for college trained personnel.

TABLE VII

EDUCATIONAL LEVEL DESIRED FOR PERSONS ENTERING AGRICULTURAL OCCUPATIONS OTHER THAN FARMING

Occupational Family	Number of Employees	Number of Employees					
		Less Than High School Graduate		Post H. S. Tech. Educ.		College Degree	No Preference
		Per Cent	Per Cent	Per Cent	Per Cent	Per Cent	Per Cent
Farm Machinery Sales & Service	492	24	4.9	263	53.4	116	23.6
Farm Supplies & Equipment	480	46	9.6	352	73.2	29	6.1
Livestock & Poultry	431	59	13.7	334	77.5	15	3.5
Crops, Forestry & Soil Conservation	992	126	12.7	677	68.4	48	4.8
Ornamental Horticulture	68	1	1.5	47	69.1	8	11.7
Wildlife & Recreation	14	0	.0	8	57.1	0	.0
Farm Service	265	12	4.5	166	62.6	48	18.0
Agricultural Service	346	4	1.2	198	57.2	39	11.3
Total	3,088	272	8.8	2,045	66.2	303	9.8

This survey confirmed the need for prospective employees background of high school and post high school experience, in addition to occupational training prior to job entry.

Residential Background Preferred of New Employees

Table VIII reveals that a farm background is not an absolute requirement for entering nonfarm agricultural occupations. Businesses and agencies indicated that a farm background was necessary in 51.7 per cent of the cases. A rural nonfarm and urban background was indicated as preferable for only 6.6 per cent of the workers while no preference was listed for 41.7 per cent. Undoubtedly, employers recognize that prospective employees with farm background are not presently available with the decline of farm population and they are willing to hire persons who are trained in agricultural subjects.

Table VIII indicates the kind of background preferred by employers in nonfarm agricultural occupations for employees and prospective employees.

Nonfarm agricultural agencies were not enthusiastic about employing urban personnel. Only about 0.4 per cent indicated urban background as desirable. However, nearly 42 per cent of the nonfarm agricultural jobs will be filled without regard to the residential background of the applicants. In the Farm Service family, over 63 per cent of the jobs will be filled with no preference as to residential background.

The majority of agricultural employers was concerned about the residential background as they will almost invariably employ those with farm or rural background in preference to urban residents. Approximately 58 per cent desired or demanded that new employees be familiar with farm and rural life.

TABLE VIII
RESIDENTIAL BACKGROUND PREFERRED OF NEW EMPLOYEES

<u>Occupational Family</u>	Number of Employees	Rural		Urban		No Preference
		Farm Per	Nonfarm Per	No. Cent	No. Cent	
Farm Machinery Sales & Service	492	324 65.8	50 10.2	0	0	118 24.0
Farm Supplies & Equipment	480	154 32.1	65 13.6	4	.8	257 53.5
Livestock & Poultry	431	280 65.0	13 3.0	6	1.4	132 30.6
Crops, Forestry & Soil Conservation	992	461 46.5	30 3.0	0	.0	501 50.5
Ornamental Horticulture	68	32 47.1	9 13.2	0	.0	27 39.7
Wildlife & Recreation	14	4 28.6	0 .0	0	.0	10 71.4
Farm Service	265	93 35.1	4 1.6	0	.0	168 63.3
Agricultural Service	346	249 72.0	18 5.2	3 .9	.9	76 21.9
Totals	3,088	1,597 51.7	189 6.2	13 .4	.4	1,289 41.7

Occupational families preferring the greatest percentage of farm reared workers were: Agricultural Service, Farm Machinery Sales and Service, and Livestock and Poultry. Occupational families with the smallest number of its employees needing a farm background were: Wildlife and Recreation, Farm Supplies and Equipment and Farm Service.

Farm Experience Preferred of New Employees

It was revealed that 1,597 or 51.7 per cent of the 3,088 jobs surveyed in the southwest sector of Louisiana, will be filled by new employees with farm experience. This experience could be on commercial or non-commercial farms.

The commercial type farm experience was preferred for only 334 or 20.9 per cent of the jobs, while 352 or 22 per cent of the jobs preferred individuals who had experience on the non-commercial type farm. Over 57 per cent of the businesses and agencies indicated "no preference" for either commercial or non-commercial types of farm experience. This is indicative that skills needed to perform necessary work could be obtained from "on-the-job" training, as the employee normally pursued his work.

It is interesting to note that 15, or 46.9 per cent, of the jobs in Ornamental Horticulture involved farm experience of the commercial type. Data reveal that employers listed no preference as to kind of farm experience for 911, or 57 per cent, of the employees needing farm experience as part of the requirements for job entry. This shows that employers place a value on farm experience in general and not particularly on type. However, it was unexpected that Livestock and Poultry indicated "no preference" for 70.7 per cent of the jobs.

TABLE IX
FARM EXPERIENCE PREFERRED OF NEW EMPLOYEES

Occupational Family	Number of Employees	Commercial Farm		Non-Commercial Farm		No Preference
		No. Per Cent	Per Cent	No. Per Cent	Per Cent	
Farm Machinery Sales & Service	324	69	21.3	94	29.0	161 49.7
Farm Supplies & Equipment	154	45	29.2	45	29.2	64 41.5
Livestock & Poultry	280	47	16.8	35	12.5	198 70.7
Crops, Forestry & Soil Conservation	461	67	14.5	105	22.8	289 62.7
Ornamental Horticulture	32	15	46.9	5	15.6	12 37.5
Wildlife & Recreation	4	0	.0	0	.0	4 100.0
Farm Service	93	26	28.0	39	42.0	28 30.0
Agricultural Service	249	65	26.1	29	11.6	155 62.3
Total	1,597	334	21.0	352	22.0	911 57.0

Most employers feel that there is a definite need for farm experiences when the employee is dealing directly with the farmer.

Agricultural Areas in Which Nonfarm Agricultural Workers Must Have Competencies

One of the major objectives of this study was to obtain information concerning the type and amount of agricultural knowledge and skills required by the various nonfarm businesses and agencies of prospective employees for job entry.

In order to obtain information descriptive of the competencies needed for each job title, agricultural subjects were categorized into four general and broad areas, namely: Animal Science, Plant Science, Agricultural Business and Marketing, and Agricultural Mechanization and Automation. Each of the subject areas was subdivided into competency groups describing the more specialized agricultural knowledge and skills thought to be needed for most employment in these specialized areas. The interviewee identified the special competencies needed for employees of a particular job title on a prepared survey form.*

After the information had been gathered, the job titles were weighted to competencies needed according to whether the employers identified the specialized competency as Necessary, Desirable or Not Necessary. The Necessary factor was given a value of 3; the Desirable factor a value of 2; and Not Necessary a value of 1. The information was sent to the Louisiana State University Computer Center for programing and processing. A scale was developed to clarify and interpret the significance of competencies for each specialized area within job titles.

Following is the scale as it applies to each occupational family:
High: 1.800-3.000, Medium: 1.400-1.799, Low: 1.000-1.399.

*See Appendix A

Tables X-1 through X-8 indicate by occupational family and level of employment the number of workers and the degree of competency needed in each agricultural subject matter area. Presumably replacements would be expected to be knowledgeable in the same areas.

Data in tables X-1 through X-8 reveal that managerial and supervisory jobs tended to require a rather broad knowledge of all subject matter areas, especially in the area of agricultural business principles and marketing. Competencies ranged from a low of 1.012 in animal science for managers in Ornamental Horticulture to a high of 2.382 in agricultural mechanics for managers in Farm Machinery Sales and Service. Presumably, all managers in all occupational families must have competencies in agricultural business management and marketing.

The sales levels of employment in most occupational families required more familiarity with specific agricultural subject areas than some of the other levels of employment. In most cases a medium and high competency rating of agricultural business management and marketing was found. Office employees, on the average, needed a medium knowledge of agricultural business, presumably to help direct the transactions between farmer and firm.

Generally, professional workers need very high competencies in all of the subject matter areas. It was noted that only in one instance did the requirements of the professional workers fall below the medium competency level, namely agricultural business management and marketing for professionals in Wildlife and Recreation.

Technical workers usually needed to be highly technical in only the area in which they specialized. For instance; technicians in Livestock and Poultry were highly knowledgeable in animal science but only needed a very

TABLE X-1

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

FARM MACHINERY SALES AND SERVICE

<u>Level of Employment</u>	<u>Number</u>	<u>Average Competency Ratings</u>				
		<u>Animal Science</u>	<u>Plant Science</u>	<u>Agri. Bus. Mngt. & Mkt.</u>	<u>Agri. Mech. & Automation</u>	
Professional	7	1.083	1.758	2.042	2.611	
Technical	0	0	0	0	0	
Managerial	100	1.408	1.762	2.364	2.382	
Supervisory	25	1.220	1.411	1.815	2.317	
Sales	72	1.378	1.629	2.080	2.236	
Office	33	1.065	1.051	2.090	1.287	
Skilled	206	1.130	1.171	1.387	2.249	
Semiskilled	49	1.058	1.127	1.134	2.083	
Unskilled	0	0	0	0	0	

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

TABLE X-2
AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES
FARM SUPPLIES AND EQUIPMENT

<u>Level of Employment</u>	<u>Number</u>	<u>Average Competency Ratings</u>				
		<u>Animal Science</u>	<u>Plant Science</u>	<u>Agri. Bus. Mngt. & Mkt.</u>	<u>Agri. Mech. & Automation</u>	
Professional	1	1.625	2.455	2.688	2.333	
Technical	0	0	0	0	0	
Managerial	141	1.715	1.690	2.222	1.717	
Supervisory	13	1.104	1.447	1.490	1.875	
Sales	71	1.715	1.700	1.808	1.674	
Office	28	1.196	1.190	1.761	1.312	
Skilled	35	1.109	1.369	1.227	1.875	
Semiskilled	139	1.292	1.237	1.238	1.688	
Unskilled	52	1.137	1.327	1.225	1.700	

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

TABLE X-3

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES
LIVESTOCK AND POULTRY

<u>Level of Employment</u>	<u>Number</u>	<u>Average Competency Ratings</u>			
		<u>Animal Science</u>	<u>Plant Science</u>	<u>Agri. Bus. Mangt. & Mkt.</u>	<u>Agri. Mech. & Automation</u>
Professional	0	0	0	0	0
Technical	12	2.323	1.250	2.292	1.556
Managerial	76	2.277	1.161	2.071	1.437
Supervisory	11	2.266	1.114	2.297	1.417
Sales	48	1.681	1.162	1.660	1.167
Office	37	1.470	1.078	1.714	1.151
Skilled	90	1.810	1.080	1.324	1.282
Semiskilled	157	1.790	1.006	1.210	1.405
Unskilled	0	0	0	0	0

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

TABLE X-4

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES
CROPS, FORESTRY AND SOIL CONSERVATION

<u>Level of Employment</u>	<u>Number</u>	<u>Average Competency Ratings</u>			
		<u>Animal Science</u>	<u>Plant Science</u>	<u>Agri. Bus. Mngt. & Mkt.</u>	<u>Agri. Mech. & Automation</u>
Professional	7	1.625	2.227	2.406	2.125
Technical	46	1.196	1.701	2.063	2.060
Managerial	153	1.249	1.784	2.303	1.799
Supervisory	41	1.103	1.644	1.951	1.942
Sales	49	1.113	1.654	1.935	1.143
Office	38	1.093	1.330	1.935	1.241
Skilled	202	1.094	1.463	1.368	1.936
Semiskilled	153	1.060	1.399	1.275	1.574
Unskilled	103	1.012	1.373	1.025	1.617

Competency Rating Scale:

High (1.800-3.000)
 Medium (1.400-1.799)
 Low (1.000-1.399)

TABLE X-5

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES
ORNAMENTAL HORTICULTURE

<u>Level of Employment</u>	<u>Number</u>	<u>Average Competency Ratings</u>			
		<u>Animal Science</u>	<u>Plant Science</u>	<u>Agri. Bus. Mngt. & Mkt.</u>	<u>Agri. Mech. & Automation</u>
Professional	1	2.125	2.909	2.750	2.167
Technical	1	1.000	1.727	1.000	1.667
Managerial	20	1.012	2.332	2.081	1.825
Supervisory	2	1.000	2.500	2.063	2.083
Sales	3	1.000	2.091	1.625	1.333
Office	1	1.000	1.000	1.625	1.000
Skilled	14	1.000	1.966	1.516	1.333
Semiskilled	6	1.000	1.939	1.292	1.944
Unskilled	20	1.042	1.758	1.219	1.306

Competency Rating Scale:
 High (1.800-3.000)
 Medium (1.400-1.799)
 Low (1.000-1.399)

TABLE X-6
 AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES
WILDLIFE AND RECREATION

<u>Level of Employment</u>	<u>Number</u>	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mngt. & Mkt.	Agri. Mech. & Automation
Professional	6	2.313	1.818	1.375	1.750
Technical	0	0	0	0	0
Managerial	0	0	0	0	0
Supervisory	4	1.250	1.591	1.750	1.417
Sales	0	0	0	0	0
Office	0	0	0	0	0
Skilled	0	0	0	0	0
Semiskilled	1	1.000	1.727	1.250	1.333
Unskilled	3	1.000	1.182	1.000	1.167

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

TABLE X-7

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

FARM SERVICES

<u>Level of Employment</u>	<u>Number</u>	<u>Average Competency Ratings</u>			
		<u>Animal Science</u>	<u>Plant Science</u>	<u>Agri. Bus. Mangt.</u>	<u>Agri. Mech. & Automation</u>
Professional	1	2.625	2.636	3.000	3.000
Technical	41	1.490	1.580	1.962	1.679
Managerial	55	1.394	1.642	1.978	2.260
Supervisory	13	1.917	2.071	2.444	2.778
Sales	3	1.125	1.182	1.625	1.750
Office	21	1.042	1.164	1.733	1.344
Skilled	72	1.052	1.188	1.142	2.299
Semiskilled	58	1.088	1.225	1.272	1.941
Unskilled	1	1.000	1.000	1.250	1.833

Competency Rating Scale:
 High (1.800-3.000)
 Medium (1.400-1.799)
 Low (1.000-1.399)

TABLE X-8

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES
AGRICULTURAL SERVICES

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mngt. & Mkt.	Agri. Mech. & Automation
Professional	110	2.211	2.152	2.354	2.112
Technical	28	1.510	1.622	1.683	1.910
Managerial	31	1.571	1.715	2.321	1.828
Supervisory	25	1.979	2.010	2.361	2.278
Sales	7	1.250	1.864	1.563	2.083
Office	54	1.332	1.494	2.057	1.357
Skilled	50	1.037	1.427	1.575	1.850
Semiskilled	11	1.750	1.100	1.313	1.217
Unskilled	30	1.375	1.327	1.175	1.533

Competency Rating Scale:

High (1.800-3.000)
Medium (1.400-1.799)
Low (1.000-1.399)

general knowledge of plant science.

However, it was indicated that generally technical workers needed a broad knowledge of basic agricultural business principles.

In most instances, the skilled and semiskilled employees were required to be familiar with only their specialized field of operation rather than possess a broad knowledge of agriculture as was found in the managerial, supervisory and sales levels of employment. The unskilled workers were required to be less familiar with agricultural subjects than any other level of employment.

Training in agricultural business and management was emphasized for workers at all levels, except those in the skilled, semiskilled and unskilled levels. Such emphasis parallels the tremendous employment opportunities for persons in management.

Continuing Education Required by Firms to Advance in Occupations

A vast majority of agencies and businesses surveyed, nearly 95 per cent, indicated that continuing education was a requirement for advancement within the firm after job entry.

Data in Table XI show the employee frequencies by occupational family for the type of training needed as indicated by the employer. The training facility used is also shown.

On-the-job training was used in 86.7 per cent of the employee cases by the various agencies and firms as the number one facility to upgrade their employees. Of the nonfarm businesses surveyed, approximately 45 per cent of their employees use firm or industry schools as means whereby they continue training and educational requirements needed for advancement. Other

TABLE XI

CONTINUING EDUCATION REQUIRED BY FIRMS TO ADVANCE IN OCCUPATIONS

facilities used for educational and training advancement ranked in importance were: vocational schools, agricultural colleges and public school adult education.

The study provides an indication that high school or indeed graduation from any school is not terminal. Continuing education is required if the individual is to be a productive member of the business.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Agriculture is tremendously broad and complex, consisting of a multiplex system of professional, technical and skilled vocational occupations. Regardless of which occupation is chosen from the heterogeneous list of agricultural jobs, each employee is required to have agricultural knowledge and highly developed skills for successful performance. With the rapid increase of science and technology, more and more of the occupations found in agriculture creep into a category called "specialized". The trend of fewer but larger farms has caused the farmer to rely on specialists to perform services that were previously executed by the farmer. Gradually, a vast nonfarm agriculture has emerged that employs as many or more workers than does farming.

With a majority of agricultural jobs existing in nonfarm agricultural businesses, a new set of agricultural competencies must be designed to qualify workers to enter such jobs. Environmental adjustments have to be made since many of these occupations are found in urban and semiurban areas.

Educators at all levels, accompanied by agricultural leaders in all segments of agriculture, are exploring new methods and techniques that will facilitate the creation of new programs that will meet the needs of the changing times. With the passage of the National Vocational Act of 1963, such programs can be initiated provided resources can be assembled to implement them.

The immediate task of this study has been to gather and record pertinent data concerning nonfarm agricultural occupations in a 12 parish area

of Louisiana, known as the Southwest Area. This report is to inform educators, prospective employees and parents of high school youth of the potential occupational opportunities available in the Area studied, plus the training required of youth in preparation for such opportunities.

Summary

This study of nonfarm agricultural occupations shows employment potential for rural youth in agricultural careers. If farm youth wish to stay in agriculture, they no longer must look to farming alone but may choose among the many jobs available in nonfarm agriculture. Major considerations include abilities, experience and educational requirements for job entry. Remuneration for chosen occupations is usually related to the amount of training and skills required for job performance.

The study was designed to secure information necessary to guide school administrators and educators in formulating high school vocational agricultural programs.

Findings were summarized as follows:

1. There were 443 businesses and agencies in the off farm agricultural complex surveyed in the southwest area of Louisiana, containing 6,889 workers--of which 3,088 were required to have knowledge and skills in agriculture. These businesses and agencies projected an increase of 328 to a total of 3,416 workers needing agricultural competencies within the next five years.
2. Occupational families having the largest number of workers were those of Crops, Forestry and Soil Conservation, Farm Machinery Sales and Service, Farm Supplies and Equipment and Livestock and Poultry. They contained 54.4 per cent of all job titles.
3. The 443 businesses and agencies surveyed listed 503 different job titles. Five years hence the job titles are expected to increase to 560, an increase of 11.3 per cent.

4. Semiskilled, Skilled, and Management levels of employment, respectively, contained the largest number of employees having agricultural competencies. Unskilled workers were found in largest numbers in Crops, Forestry and Soil Conservation and Farm Supplies and Equipment. A vast majority, 80.8 per cent of all professional workers, were found in Agricultural Service. The largest numbers of technical workers were in the occupational families of Crops, Forestry and Soil Conservation and Farm Service.
5. The firms and agencies indicated the minimum age for replacing present employees would be approximately 24 years of age. The average ages for employees in all occupational families ranged from 32 to 39, with an overall average approximating 35 years. The maximum age of job entry was found to be approximately 47 years when replacing personnel or hiring additional persons.
6. The study revealed in a vast majority of cases that employees are compensated in direct relation to their background of training and experience coupled with responsibility. Unskilled pay was at the low level while Professional workers received the largest salaries. Distinct pay advancements were given with tenure, with the exception of Unskilled and Semiskilled employees, and/or as the employee became knowledgeable in the needed skills and techniques.
7. Generally, firms and agencies were not willing to hire replacement workers who have less than a high school education. The study indicated that 88.6 per cent of replacement workers need a high school education or beyond. The employees not needing high school education were located in the Unskilled level of employment, most of which were in the occupational family Crops, Forestry and Soil Conservation. Nearly 15 per cent of the total agricultural workers were required to have a college degree, or some college training.
8. Farm background was considered desirable for employment in over 51 per cent of the worker cases, but is not necessarily a requirement for job entry. The businesses and agencies surveyed considered urban background desirable in only 0.4 per cent of the employee cases. Agricultural employers in most cases are eager to hire workers with farm backgrounds but in many cases indicated no preference.
9. There was practically no discrimination between commercial and non-commercial farm experience. Employers indicated no preference as to type of farm experience in 57 per cent of the cases requiring farm background as a prerequisite to job entry.
10. Knowledge of agricultural subjects, plus skills required, varied according to the work performed in each level of employment for each occupational family. Many similarities were found among the levels of employment. Generally, managerial and supervisory jobs required a rather broad knowledge of all agricultural subject matter areas, especially in the areas of agricultural business

principles and marketing. Skilled, Semiskilled and Unskilled laborers were required to be less familiar with all the agricultural subjects but generally were required to be competent in their specialized field. Usually professional and technical workers needed to be very proficient in a single specific subject matter area, or a component part of an area, in which they were employed. Sales and Office employees were required to be familiar with agricultural subjects in as much as this would apply to conduct of business with farmers. Relatively speaking, all workers above the Semiskilled level of employment need a fairly broad knowledge of agricultural subject matter.

11. Most firms and agencies indicated that employees could upgrade themselves through on-the-job training and firm and or industry schools. It was generally felt that most employees above the Unskilled level of employment could benefit by continuing their education. Public schools as they presently operate, had a rather small impact upon the influence of continuing education of agricultural employees..
12. Generally, all employers expressed a need for agriculturally trained workers.

Conclusions

Larger but fewer farms have created a profound problem for students enrolled in vocational agriculture since many of them will not be able to farm. A study of the twelve parishes in the Southwest Louisiana Area shows many new fields of agricultural employment available to those unable to farm. In the Area, science and technology have combined to eliminate many of the jobs once performed on the farm, yet the growth of nonfarm agricultural organizations has developed new jobs and careers now available to youth. Farm youth, largely because of agricultural experience from farm backgrounds, have a distinct advantage for gainful employment in them if their experience is supplemented with appropriate knowledge and skill in agricultural subjects.

Information gathered from nonfarm agricultural concerns in the Southwest Louisiana Area shows that rural boys who aspire to employment in them should have pre-job training in agricultural subjects of the kind required

by a particular job title, or a cluster of titles. Obtaining such training in high school will enable boys to move directly into the jobs of their choice without working at various other jobs over a period of years in an effort to acquire necessary qualifications by experience.

The high school thru its department of vocational agriculture can provide the basic training and experiences required by many of the jobs found in the Area's nonfarm agricultural complex, especially those making up the semiskilled and skilled levels of employment. Conclusions drawn from the study to aid educators in providing the additional training needed to qualify students for employment follow:

1. The businesses and agencies making up the Southwest Louisiana area's nonfarm agricultural interests are many and varied, and represent nearly all phases of nonfarm agriculture. Almost one-half of their employees must have knowledge and skill in agricultural subjects. They work in a great variety of job titles at all levels of employment. Both job titles and numbers of employees are increasing, giving high promise of job opportunities to youth of the Area with appropriate education and training.

Employment opportunities in the greatest number are offered in Farm Machinery Sales and Service, Farm Supplies and Equipment and Agricultural Services. Expanding employment includes Managerial, Supervisory, Technical, Sales and Professional, with decreasing workers at the Semiskilled and Unskilled levels.

2. High school graduates do not enter nonfarm agricultural occupations upon graduation, but must acquire additional training before job entry to offset the lack of specific preparation. The time gap between employment and graduation approximates a five-year period. Smooth transfer from high school to a job can be effected by training programs appropriate to the family of occupations in which youth desires employment.
3. Compensation to employees in nonfarm agricultural concerns is in relation to education and training, together with level of employment. Lower employment levels--Semiskilled and Unskilled--pay less and offer little opportunity for pay increases. Youth entering these levels but looking to advancement must have enough education and training to advance to the Skilled or other levels of employment.

4. Employers in nonfarm agricultural concerns of the Area predominately favor employment of high school graduates. Many require some college training, even for work at below the professional level. Youth looking to satisfactory employment should consider first the goal of obtaining a high school education.
5. Farm experience is not a requirement for employment in nonfarm agriculture, yet youth with it are preferred. Experience gained on a commercial or noncommercial farm is acceptable. Where it is a requirement, high school training in agricultural subjects fulfills this demand.
6. To qualify for nonfarm agricultural jobs found in Southwest Louisiana interested youth must have, in addition to a high school education, training in basic agricultural production. Additionally, the agricultural knowledge and skill involved in the performance of a particular job title, or a cluster of titles, for which preparation is intended must be acquired.
7. Employee advancement in nonfarm agricultural jobs, or from one level of employment to that above it, is closely associated with continuing, on-the-job training. Training in firm or industry programs is usually required, as job requirements advance. Workers without sufficient education to profit by additional and continuing training will not experience appreciable progress.

Recommendations

The typical school administrator, supervisor and agricultural instructor in Southwest Louisiana is highly interested in what students do in school and how well they do it in preparation for work beyond high school. Moreover, they are not only concerned with what students do in classrooms, but why students do it.

Clearly, there are three major orders of consideration involved when working with boys who are interested in agricultural careers, but have no opportunity to farm. The first order is that of student occupational objectives; the second is that of occupational opportunities; and the third is that of appropriate training programs.

The National Vocational Education Act (Morse-Perkins) implies that students enrolled in vocational training must have an occupational objective, with a reasonable expectancy of employment. Where students have a bona fide objective leading to available occupational opportunities, and the school provides appropriate training programs, then what students do in the classroom is meaningful and they can do it better -- they understand why they are doing it, along with all others concerned.

Undoubtedly, a sizeable number of boys taking agriculture in the high schools of Southwest Louisiana are without satisfactory opportunities to farm. It is equally probable that many of this number are interested in off-farm agricultural careers, yet they do not expect or anticipate that what is being done in the agriculture classroom will be identical to the requirements of any particular nonfarm agricultural occupation.

In the process of growing up and experiencing, the student in vocational agriculture must have an opportunity to examine the various aspects of his environment, together with his occupational aspirations; all in the light of his capabilities and career opportunities available to him. He can then draw a private map showing his part of the world, emphasizing his role in the work world.

A "dynamic agriculture" in Southwest Louisiana demands an educational environment and a program which affords boys of the Area the opportunity to develop their agricultural interests, along with the competencies involved. Students differ; also, the agricultural industry of the Area differs. It follows, then, that the educational environment must contain a program comprehensive enough to take these differences into account.

Presently, there are basic gaps in most vocational agriculture programs as to provisions for causing a smooth transfer of students to non-farm agricultural occupations or even farming. The consequence is that what is done in the classroom may have little relation to what students do after leaving school. How to transmit the fruits of classroom work to nonfarm agricultural businesses and agencies is a major problem of the moment. No system of education which fails to accept its challenge can train rural boys in any meaningful sense.

In considering how to deal with this difficult but timely problem, findings of this study warrant some pertinent recommendations:

1. Every boy with a farm background bears the imprint of the farm. Even as an adult he is anchored to his farm past. The educator, such as the agricultural instructor who is concerned with making education assist the boy towards maturity, must study how such projections from the past influence education and whether the agricultural training program tends to perpetuate this influence.

It follows that the farm boy is a step ahead of the town or city reared boy, if each is interested in an agricultural career. For the boy living on the farm, vocational agriculture should provide an opportunity to more fully utilize early interests and experiences.

Vocational agriculture involves the individual student, his aspirations and capabilities. If his training is going to facilitate the maturing process, then he must make a self-study and arrive at career objectives in areas of work where opportunities exist for satisfactory employment.

2. To develop acceptable occupational objectives students involved must have ready access to pertinent and timely occupational information. Teachers must master an enormous amount of changing occupational data, along with information about their students.

Organized instruction, both in the classroom and in forums, dealing with occupations contained in nonfarm agricultural businesses and agencies is a means of maturing students to the extent necessary for developing occupational objectives, especially if such instruction accompanies self-studies.

3. Student occupational objectives in agriculture can be classified under at least three fields of service:

- A. Farming, or agricultural production;
- B. Professional; and
- C. Nonfarm agricultural businesses and agencies.

Consequently, a three-pronged approach must be made towards a change in existing training programs at the high school level, taking into consideration the probability that any one school will have students in all three categories.

- 4. Students to gain the maturity required for satisfactory job performance must have experiences, before leaving school, patterned according to actual working conditions.

To provide these experiences the school must, in addition to its own resources, rely on the home or other farm; the nonfarm agricultural business; plus the professional agriculturist.

- 5. Knowledge and skill in agricultural subjects required for job entry in nonfarm agricultural firms of the Area under study may be described as general and specialized. Generally, job titles found demand of the prospective worker a core of knowledge and skill in basic agricultural production; crops, live-stock, soils, management and equipment. In addition, job titles require more specialized knowledge and skill needed to perform the services involved under a specific title.

An obvious implication runs throughout all research about preparation for nonfarm agricultural jobs; namely, that training programs must contain at least three major areas of student experiences to give the maturity essential to satisfactory job entry:

- A. Experiences must be given in basic agricultural production processes, including; plants, animals, soils, management, and equipment;
- B. Experiences must be given in the specialized agricultural knowledge and skill involved in a job title or a cluster of titles; and
- C. Experiences must be given at the pre-job level under practical working conditions.

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APPENDIX

APPENDIX A

Louisiana State University
College of Agriculture
Department of Agricultural Education
Baton Rouge, Louisiana

Interviewer _____

Date of Interview _____

CONFIDENTIAL

Pre-Employment and Continuing Educational Needs of Persons Engaged in
Off-the-Farm Agricultural Occupations in Selected Areas of Louisiana

Form I

Firm Number _____ Occupational Family _____

I. Name of Business or Service _____

II. Address _____ Town _____

Parish _____ Area _____

III. Person Interviewed _____

Position _____

IV. Estimated per cent gross income that is agriculturally oriented _____

V. Major agricultural products and/or functions of business or service

VI. Employees in this business or service (Total Number) _____

A. For employees needing competencies in agriculture, complete the
following:

Existing Job Titles	Number of Employees			
	Presently	Five Years Hence	Full-Time	Part-Time
Full-Time	Part-Time	Full-Time	Part-Time	
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____

Form I (Cont'd)

<u>Existing Job Titles</u>	Number of Employees			
	Presently		Five Years Hence	
	<u>Full-Time</u>	<u>Part-Time</u>	<u>Full-Time</u>	<u>Part-Time</u>
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
B. <u>Anticipated New Job Titles</u>				
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____

Fill out a separate Form II for each job title listed above.

Louisiana State University
College of Agriculture
Department of Agricultural Education
Baton Rouge, Louisiana

Interviewer _____

Date of Interview _____

CONFIDENTIAL

**Pre-Employment and Continuing Educational Needs of Persons Engaged in
Off-the-Farm Agricultural Occupations in Selected Areas of Louisiana**

Form II

Firm Number _____ Occupational Family _____ Level of Employment _____

I. Name and Address of Firm _____

II. Job Title _____

III. Number of workers in this Job Title

Full-Time _____ Part-Time _____

IV. Anticipated Number of workers Five Years Hence

Full-Time _____ Part-Time _____

V. Average Age _____ Minimum for Entry _____ Maximum for Entry _____

VI. Wages or Salary Per Month: (Beginning - Maximum - Present)

1. ____ 150-200 4. ____ 301-350 7. ____ 451-500 10. ____ 601-650

2. ____ 201-250 5. ____ 351-400 8. ____ 501-550 11. ____ 651-700

3. ____ 251-300 6. ____ 401-450 9. ____ 551-600 12. ____ 700 and above

VII. Activities and Duties of Persons with this Job Title (Detail)

VIII. Agricultural competencies with which worker must be familiar to do job

A. Area: Animal Science

<u>Nec-</u> <u>essary</u>	<u>Desir-</u> <u>able</u>	<u>Not Nec-</u> <u>essary</u>
------------------------------	------------------------------	----------------------------------

- _____ 1. Breeding Farm Animals
- _____ 2. Livestock Feeding and Nutrition
- _____ 3. Sanitation, Disease and Parasite Control
- _____ 4. Housing Equipment
- _____ 5. Management
- _____ 6. The Dairy Manufacturing Industry
- _____ 7. Processing

Packing Plants
Creameries
Poultry Processing
Butchering

- _____ 8. Marketing

Packing Plants
Creameries
Poultry Processing Plants
Livestock Auctions

B. Area: Plant Science

- _____ 9. Propagation
- _____ 10. Soils ; and Fertilization
- _____ 11. Control of Insects _____ Diseases _____
Weeds _____
- _____ 12. Management
- _____ 13. Production of Ornamental Plants
- _____ 14. Landscaping
- _____ 15. Ginning
- _____ 16. Warehousing

B. Area: Plant Science (cont'd)

<u>Nec-</u>	<u>Desir-</u>	<u>Not Nec-</u>	
<u>essary</u>	<u>able</u>	<u>essary</u>	
			17. Processing (food, seed, grain, etc.)
			18. Marketing
!			19. Forestry
			Establishing a Stand
			Hardwood Control
			Fire Control
			Estimating and Grading
			Disease Control
			Insect Control
			Harvesting
			Marketing
			Manufacturing
			Pulp Wood

C. Area: Agricultural Business Management and Marketing

- _____ 20. Records and Accounts, Budgeting and Analysis
- _____ 21. Agricultural Financing, Credit and Insurance
- _____ 22. Farm Organization and Management
- _____ 23. Labor Management
- _____ 24. Marketing Problems and Practices
- _____ 25. Agricultural Policy
- _____ 26. Agricultural and Related Price Analysis
- _____ 27. Cooperatives and Business Organizations

D. Area: Agricultural Mechanics and Automation

- _____ 28. Farm Power and Machinery
- _____ 29. Farm Buildings and Conveniences
- _____ 30. Farm Electrification and Processing
- _____ 31. Soil and Water Conservation

D. Area: Agricultural Mechanics and Automation (cont'd)

Nec- Desir- Not Nec-
essary able essary

32. Farm Shop (welding, plumbing, etc.)

33. Farm Construction and Maintenance

E. Other Agricultural competencies that are needed for this Job Title _____

IX. Educational Level Desired for Job Titles (Check only one)

- 1. Less than High School Graduate
- 2. High School Graduate
- 3. Post High School Technical Education
- 4. Some College
- 5. College Degree (Baccalaureate)
- 6. Master's Degree
- 7. Doctor's Degree
- 8. No Preference

X. Residential Background (Check only one)

- 1. Farm
- 2. Rural, nonfarm
- 3. Urban
- 4. No Preference

XI. Farm Experience

- 1. On a commercial farm
- 2. On a noncommercial farm
- 3. No Preference

XII. Experience Desired to Enter this Job Title _____

XIII. Limitations on Entering this Job Title

A. Licensing or Certification

- 1. Professional
- 2. Industrial
- 3. Civil Service

B. Labor Law Restrictions _____

C. Labor Union Restrictions _____

D. Other (specify) _____

XIV. Education Required to Advance in this Job Title

A. Technical short course or training provided by:

- 1. Your firm or the industry as a whole
- 2. On-the-job training
- 3. Public school (adult education)
- 4. A vocational school
- 5. An agricultural college
- 6. None

APPENDIX B

Following is a list of towns in Area III which were surveyed.

**Sulphur
Jennings
Crowley
Abbeville
Franklin
Jeanerette
New Iberia
St. Martinville
Breaux Bridge
Opelousas
Ville Platte
Oberlin
Oakdale
Bunkie
Eunice
Cecilia
Arnaudville
Fenton
Washington
Lawtell
Leonville
Erath
Welsh
Church Point
Kinder
Iowa
Lacassine
Iota
Sunset
Palmetto
Elton
Roanoke**

Following is a list of nonfarm agricultural businesses and agencies in Area III cooperating in the survey.

Agri. Stabilization and Conservation Service, New Iberia
Hill Top Nursery, New Iberia
Iberia Gardens, New Iberia
Conrad Rice Milling & Planting Co., New Iberia
Winn Dixie No. 1457, New Iberia
A & P Store, New Iberia
Sam Broussard Inc., New Iberia
Phil-A-Sack No. 7, New Iberia
New Iberia Tractor & Implement Co., New Iberia
Food Town Inc., New Iberia
New Iberia Hardware, New Iberia
Hebert Feed & Seed Store, New Iberia
Pelican Creamery, New Iberia
Reaux Animal Clinic, New Iberia
Iberia Animal Breeders Co-op, New Iberia
Dr. George Broussard, Vet., New Iberia
Dr. Woodburn Animal Clinic, New Iberia
Evans Poultry & Egg Co., New Iberia
DeCuir's Dairy, New Iberia
Mayeux Feed Store, New Iberia
Cultivation Tools Inc., New Iberia
Hoy's Tractor Co., New Iberia
Pecot Wells & Pumps, New Iberia
Cleco, New Iberia
Iberia Rental Service, Inc., New Iberia
Drago Flower Shop, New Iberia
Dauterine's Grocery & Market, New Iberia
Phil-A-Sack No. 10, New Iberia
Iberia Parish Farm Bureau, New Iberia
Delcombre's Meat Market, Breaux Bridge
Guilbeaux's Nursery, Cecilia
Guidry's Nursery,
Agri. Stabilization and Conservation Service, Breaux Bridge
Soil Conservation Service, Breaux Bridge
Oakdale Cotton Gin, Cecilia
Darby Gin, Arnaudville
Michael Broussard & Son, Inc., Breaux Bridge
Lagrange, Inc., Arnaudville
M. B. Darby Store, Arnaudville
Hardy Drug Store, Cecilia
Dupuis Produce Co., Breaux Bridge
United Food Inc., Breaux Bridge
Bill Parker's Garage, Oakdale
Oakdale Motors Inc., Oakdale
Farmers Home Administration, Oakdale
Allen State Bank, Oakdale
Lubben Flower Shop, Oakdale
Oakdale Florists, Oakdale
Mowads Food Market, Inc., Oakdale

SSS Food Store, Oakdale
Dixie Dandy, Oakdale
A. F. Mann-Forester, Oakdale
Ronnie Chenevert-Forester, Oakdale
Farmcraft Associates Inc., Oakdale
Robert E. Mitchell-Forester, Oakdale
Vancouver Plywood Co. Inc , Oakdale
Hillyer Deutsch & Edwards Inc., Oakdale
Kelly Weber & Co. Inc., Oakdale
Erwin Brox. Gen. Mdse., Oakdale
Roy Tractor Co., Ville Platte, La.
F. Hollier & Sons, Ville Platte
Vidrine International Sales, Inc., Ville Platte, La
G. & S. Implement Co., Inc., Ville Platte
Evangeline Seed Co., Ville Platte
Evangeline Farmer's Co-op., Ville Platte
Evangeline Creamery, Ville Platte
Joe Tate's Commission Barn, Ville Platte
Fusilier Packing, Ville Platte
Evangeline Parish Artificial Inseminators, Ville Platte
Service Gin, Ville Platte
Ville Platte Rice Dryer Inc., Ville Platte
Bert Flower & Gift Shop, Ville Platte
Opebusas Production Credit Assoc., Ville Platte
Evangeline ASCS Parish Office, Ville Platte
Soil Conservation Service, Ville Platte
Vocational Agri. Dept., Ville Platte
L.S U. Agricultural Extension Service, Ville Platte
Fontenot's Rice Dryer & Warehouse, Eunice, La.
Basile Rice Drier Inc., Basile
Basile Canal Co., Basile
Sonnier's Welding Shop, Basile
E. E. Agnilland Welding Service, Basile
Jeanine's Garage & Farm Shop, Basile
Manuel's Slaughter House, Basile
G. L. Deville Lumber Co., Basile
Guidry's Feed Store, Basile
Basile Farm Supply, Basile
City Cash Store, Basile
Hooker Farm Chemicals Inc., Eunice
Hebert's I. G. Food Store.. Basile
Cash & Carry, Basile
Moreau's Sausage Kitchen, Basile
Petitjean Animal Hosp., Rayne
Dixie Farm Supply, Rayne
E. C. Fremaux & Sone, Inc., Rayne
Acadia Feed & Fertilizers, Rayne
Landry's Purina Feeds, Rayne
Riceland Hatchery, Rayne
Dudley Leger's Slaughter & Meat Packing, Rayne

Hanks Warehouse & Rice Drying, Rayne
Rayne Rice Drier, Rayne
Cossen Greenthumb Nursery, Rayne
Labry Rice Mill & Custom Feed Crushing, Rayne
Leger & Son Welding Shcp, Rayne
Haure Machine Shop Inc., Rayne
Constantin & Sons Inc., Rayne
Stamm Scheele, Inc., Rayne
Soileau's Rice Mill & Feed Crusher, Rayne
Hains & Leger Flying Service, Rayne
Dr. W. H. Butler, Vet, Ville Platte
Boone's Welding Whop, Ville Platte
Latour's Welding Shop, Ville Platte
Bobwhite Syrup Mill,
Mona's Flower & Gift Shop, Ville Platte
Dr. J. L. Holmes, Vet., Ville Piatte
Lamar Laflew Store, Ville Platte
Ville Platte Iron Works, Ville Platte
A & P Stores, Ville Platte
Eunice Superette Slaughter House, Eunice
Agricultural Equipment Inc., Eunice
One-Ninety Tractor & Equipment Co., Eunice
L. G. Seale Co., Inc., Eunice
Ardoins Feed Store, Eunice
Miller & Dominique Stockyards, Eunice
Agricultural Stabilization & Conservation Service, Opelousas
Opelousas Production Credit Assoc., Opelousas
Federal Land Bank Ass'n., Opelousas
La. Wildlife & Fisheries, Opelousas
Southwest Produce Co., Opelousas
Brown Alsbrook Commission Barn, Opelousas
Stouts Slaughter House, Opelousas
La. State of Milk Testing Division, Opelousas
J. B. Sanday, Opelousas
J. M. Lafleur Hardware & Furniture, Lawtell
Olinde Hardware & Furniture, Opelousas
Louisiana Agri. Co-op Inc., Opelousas
Bryan Ledaux Tractor Co., Opelousas
Farmer Home Administration, Opelousas
Soil Conservation Service, Opelousas
Dozauche Feed, Seed & Supply Store, Opelousas
Onnebane's Food Lane, Opelousas
Dupuis' Slaughter House & Market, Arnaudville
Roy's Slaughter House, Arnaudville
Layton Ledoux Slaughter House, Opelousas
Fitz I. G. Food Store, Opelousas
Speyrer Brothers, Leonville
Dalfrey's Gin, Leonville
Cains Syrup Mill, Opelousas
Jim's Flower Shop, Opelousas

Speyrer's Drilling Company, Leonville
Superior L. P. Gas Co., Inc., Opelousas
Stelly's Blacksmith Shop, Leonville
St. Landry Parish Farm Bureau, Opelousas
St. Landry Bank & Trust Co., Opelousas
Planters Trust & Saving Bank, Opelousas
Aswell Hardware Store, Breaux Bridge
Atlas Feed Mill, Inc., Breaux Bridge
Winn Dixie, St. Martinville
Huval's Grocer & Meat Market, Cecilia
Corbett Canning Co., Inc., Cecilia
Evangeline Pepper & Food Products Inc., St. Martinville
Cajun Chef Products, St. Martinville
Levert-St. John, Inc., St. Martinville
Cecilia Food Preservation Center, Cecilia
St. Martin Artificial Breeding Circuit, Breaux Bridge
Farmer-Merchants Bank & Trust Co., Breaux Bridge
Hardy's Drugs, Arnaudville
Ashton P. Roberton, Breaux Bridge
Farmer's Home Administration, St. Martinville
Huval's Animal Hospital, Breaux Bridge
Dr. Emmet E. Houeye, Vet., St. Martinville
L.S.U. Extension Service, Breaux Bridge
St. Landry Parish School Board, Opelousas
General Gas Div. of Tuloma, Inc., Jeanerette
St. Martin Bank & Trust Co., St. Martinville
Breaux Bridge Bank & Trust Co., Breaux Bridge
B. J. Angelle Produce, Arnaudville
Hardy Bros., Arnaudville
Jeanerette Hardware & Feed Co., Jeanerette
Millard Manina Co., Jeanerette
Broussard Machine Co. Inc., St. Martinville
Melancon Repair Shop, Breaux Bridge
Zerangue Repair Shop, Arnaudville
J. & L. Engineering Co., Jeanerette
Teche Tractor Co., St. Martinville
Switzer Sales & Service, Jeanerette
Welsh Animal Clinic, Welsh
Fontenot Motors, Welsh
Abell & Son, Welsh
Taylor Implement Co., Welsh
Navarre & Doan Machinery Co., Welsh
Mutual Warehouse Inc., Welsh
American Rice Growers Assoc., Welsh
La. Agricultural Co-op, Welsh
Marcantel's Feed Store, Welsh
La. Lift Pump Co., Welsh
Griffith Lumber Co. Inc., Welsh
Crowl Machine Shop, Welsh
Industrial Welding Co., Welsh

Lyon Flying Service, Welsh
Nick's Flying Service, Welsh
Smith Bros. Co., Church Point
Theo Daigle & Bro. Inc., Church Point
Burleigh Farm Supply, Church Point
Delahoussaye Slaughter House, Church Point
Don's Poultry, Church Point
Ignace Venable Potato Shed, Church Point
Horechy Gins Inc., Church Point
Church Point Food Preservation Lab, Church Point
Johnson Garage, Church Point
Church Point High School, Church Point
Mayfield Hardware, Kinder
Cash & Carry, Kinder
Fenton Mobil Station & Farm Shop, Fenton
Kinder Super Market, Kinder
Cappel's Drugs, Veterinary Dept., Kinder
Topcrop Fertilizer Co., Iota
Stagg's American Oil, Kinder
Karams Esso Service, Fenton
Doumire Esso Distributors, Kinder
Kinder Feed Store, Kinder
Irving Hayes, Cattle Dealer, Welsh
Fenton High School, Fenton
Kinder Rice Dryer, Kinder
Fenton Rice Co-op., Fenton
Lacassine Rice Co-op., Lacassine
A.J.V. Artificial Breeding, Unit, Crowley
Sneed Flying Service, Crowley
Sevsat Flying Service, Egan
Egan Feed Store, Egan
F. N. Hayes Estate Warehouse, Iota
Doucet Oil Agency, Iota
Bossley Oil Co., Iota
Iota Rice Dryer, Iota
Mowata Rice Dryer, Eunice
Iota High School, Iota
Agric. Extension Service, Crowley
Pousson Welding Shop, Iota
Leger Welding Service, Iota
Hayes Hardware & Co. Inc., Iota
Southwest Pure Milk, Crowley
Lanier International Inc., Abbeville
Rene's Implement Co., Abbeville
Victory Supply Company, Abbeville
Sunset Supply, Sunset
Abbeville Commission Barn, Abbeville
Vermilion Frozen Locker Plant, Abbeville
Sunset Food Preservation Lab., Sunset
Castille & Gonsoulin (Buyers & Shippers), Sunset
Riviana Food Company, Abbeville
Stelly Bro. Produce Co., Grand Coteau
Hessian Dairy & Feed Mill, Sunset

Brossard & Teal Flying Service, Abbeville
Vermilion Agric. Extension Service, Abbeville
Agric. Stabilization & Conservation Service, Abbeville
Dr. Perkin's Veterinary Clinic, Abbeville
USDA Soil Conservation Service, Abbeville
Vermilion Parish Agri. Teachers, Abbeville
Farmers Home Administration, Abbeville
Dr. Harold's Animal Hospital, Abbeville
Chris Crusta Flying Service, Abbeville
Vermilion Breeding Unit, Abbeville
Southern Gin, Erath
Vermilion Creamery, Abbeville
Vincent's Slaughter House, Abbeville
Broussard Feed Mill, Abbeville
Duck Farm Supply Corp., Abbeville
L. & S. Feed Store, Erath
Erath Farm Supply, Erath
Guy Broussard Equipment Co., Abbeville
Langlinais Tractor Inc., Abbeville
Knight Hardware Co. Inc., Jennings
Farm Supply Co. Inc., Jennings
Tide Products Inc., Jennings
Jim & Edna's Seed Store, Jennings
Marcental's Feed Store, Jennings
Jennings Abattoir & Packing Co., Jennings
Rogers Market & Abattoir, Jennings
Spurry Machinery Co., Inc., Jennings
A. B. Leonard Aviation Co., Jennings
Freyou Flowers, Jennings
Lynn Flowers, Jennings
Riviana Foods, Inc., Jennings
Jennings Rice Drier, Jennings
St. Germain & Naze Lumber, Jennings
Little Flower House, Jennings
Hollier Implement Co., Opelousas
J. & L. Engineering Co., Opelousas
LeDoux's Oliver Tractor Co., Opelousas
Dixie Equipment Co., Opelousas
Stelly's Feed Mill, Opelousas
Niagara Chemical Division, Opelousas
Opelousas Milling Co. Inc., Opelousas
Clover Farm Creamery, Opelousas
Food Town Inc., Opelousas
National Food Stores, Opelousas
Bellard's Poultry Market, Opelousas
Child's Tree Surgeon, Opelousas
Durio's Flower Shop, Opelousas
Louisiana Nursery & Co., Opelousas
Niagara Farm & Garden Center, Opelousas
Indian Hills Country Club, Opelousas
Animal Medical Center, Opelousas
Curries Feed Store, Sulphur

Duhon's Supply & Record Shop, Sulphur
Menards Feed Store, Sulphur
Heberts Western Store, Sulphur
Sulphur Florist, Sulphur
Eddie Alexander's Nursery, Sulphur
Lawton Rice Dryer, Sulphur
Romero's Fruit & Vegetable Market, Sulphur
Calcasieu Marine Bank, Sulphur
Sulphur High School, Sulphur
Ward 4 Recreation Golf, Sulphur
West & Ellender Slaughter Inc., Sulphur
Elkins and Leger Slaughter, Sulphur
Hardey Market & Slaughter, Sulphur
Dr. R. E. Prince, Jr. Vet., Bulphur
Brewer-Meinstedt, Palmetto
Avoyelles Furniture Co-op., Evergreen
Guaranty Seed Co. Inc., Bunkie
Union Oil Co., Bunkie
People's Moss Gin Co., Palmetto
Rabalais Truck & Tractor, Bunkie
Voelker Implement Co., Bunkie
Oberlin Equipment Co., Oberlin
Western Auto, Elton
Pierrotti Auto Supply, Elton
DX-Canal Bulk Plant, Elton
Jenkins Lumber Yard, Elton
Elton Storage and Supply, Elton
Calcasieu Marinc National Bank, Elton
Fontenote Tire Service, Elton
National Brand Food Store, Elton
Daley's Grocery & Market, Jennings
Elton Rice Drier, Elton
Producers Rice Dryer, Elton
Community Rice Dryer, Elton
Shelby Putman, Inc., Elton
G. T. Modlish, Inc., Jennings
Black Hardware Co., Jennings
Southern Waterwell Corp., Roanoke
Roanoke Warehouse, Roanoke
Curtis Welch Ford Imp. Co., Roanoke
Roanoke Machine Shop, Roanoke
Roanoke Engine Service, Roanoke
Roanoke Rice Co-op., Roanoke
Roanoke Dryer Storage & Land Service, Roanoke
Burgess Lumber Co. Inc., Jennings
Daleys Grocery & Market, Jennings
MES Food Market, Jennings
Constant Pest Control, Jennings
Flying Service, Jennings
Howard Water Well Service, Jennings
Roy's Welding Shop, Jennings
Prech-Walker Farms, Inc., Jennings
Ryan Machinery Co., New Iberia

Elie Seaux & Sons, New Iberia
D. H. Castille, New Iberia
Farmers Grain Co., New Iberia
Red Barn Fertilizer & Chemical, New Iberia
Theriot Chemical Co. Inc., New Iberia
Agrico. Chemical Co., New Iberia
Fulton A. Armentor Meat Market, New Iberia
Steinberg Hide, Inc., New Iberia
Bowin Meat Market, New Iberia
E. J. Delcambre Slaughter House, New Iberia
Evangeline Dairy Products, Inc., New Iberia
A. Dubois Meat Market, New Iberia
Jerry's Meat Market, New Iberia
Conrad Rice Milling Co., New Iberia
B. F. Trappey & Sons, Inc., New Iberia
Stella's Greenhouse, New Iberia
Soil Conservation Service, New Iberia
Iberia Farmers Home Administration, New Iberia
Iberia Parish Agric. Extension Service, New Iberia
Iberia Parish ASCS, New Iberia
Federal Land Bank Assoc., New Iberia
Opelousas Production Credit, New Iberia
St. Mary Parish ASCS, Franklin
La. Cooperative Extension Service, Franklin
Hoy's Pontiac Co., Franklin
Bunkie Wood Products Co., Bunkie
J. & L. Engineering Co., Bunkie
Newmans Nursery & Greenhouse, Bunkie
Nipak Inc., Crowley
Roberts Rice Mills, Inc., Crowley
Savoir Tractor & Implement Co., Crowley
Hall's Feed & Seed Store, Crowley
Dr. H. H. Tucker Animal Hosp., Crowley
Industrial Fumigant Co., Crowley
Rice City Tractor Corp., Crowley
Farmers Home Administration, Crowley
Jennings Production Credit Assoc., Crowley
Federal Land Bank, Crowley
Pizzalatto Meat Market, Crowley
Soil Conservation Service, Crowley
Acadia Agri. Extension Service, Crowley
Rice Experiment Station, Crowley
Parrott Larry Inc., Crowley
Dore Rice Mill, Crowley
Grade A Feed & Farm Supply, Crowley
Brown & Cassidy Warehouse, Crowley
Robicheaux & Sons Meat Market, Crowley
Hooker Fertilizer-Chemical Inc., Crowley
South Coast Milling Co., Crowley
Hollins Warehouse, Crowley
Ziegler-Trahan Dairy Products, Crowley
Scholl's Bag Co., Crowley

Orkin Pest Control, Crowley
U. S. Rice Grading Office, Crowley
Louisiana Irrigation & Mill Co., Crowley
Southwestern Equipment, Crowley
Tractor & Implement Service, Crowley
Rice City Tractor Corp., Crowley
Black Agric. Service, Crowley
Leonard's Inc., Crowley
Acadia Machine & Equipment Co., Crowley
Eagle Rice & Feed Mill Inc., Crowley
Supreme Rice Mill, Inc., Crowley
Crowley Grain Drier Inc., Crowley
Greens Hardware & Machinery Co., Crowley
Continental Bag Co., Crowley
Helo Bros., Inc., Crowley
Calcasieu Mercantile Co., Inc., Crowley
Jo-Mill Stores, Inc., Crowley
Acadia Vermilion Rice Irrigation Co., Inc., Crowley
Riviana Foods, Inc., Crowley
Fortson Veterinary Hospital, Crowley
Iberia Sugar Co-op., Inc., New Iberia
Acadia Parish Farm Bureau, Crowley
W. H. Hodges Co., Crowley
Hope Rice Mill, Crowley
Guillory's Slaughter House, Bunkie
Paul Hardy's Slaughter House, Bunkie
Ray's Welding Service, Bunkie
United Seed Co., Bunkie
Mac's General Repair Shop, Bunkie
Cajun Sugar Cooperative, New Iberia
Soileau's Feeds, Inc., New Iberia
Rex Milling Co., New Iberia
Crowley Grain, Inc., Crowley

APPENDIX C

The following list reveals the job titles in each of the eight occupational families, including in addition, the number of workers found in each job title.

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Machinery Sales & Service	Professional Designing Engineer	7
	Total Professional.	7
	Technical	
	Total Technical.	0
	Managerial	
	General Manager	9
	Sales Manager	6
	Business Manager	1
	Parts Manager	25
	Service Manager	6
	Manager	22
	Office Manager	3
	Asst. General Manager	1
	Asst. Manager	5
	President	2
	Asst. Parts Manager	1
	Shop Manager	2
	Owner-Manager-Salesman	3
	Owner	2
	Materials Manager	1
	Asst. Manager & Salesman	3
	President-Manager	1
	Secretary & Treasurer	1
	Owner-Manager	6
	Total Managerial.	100
	Supervisory	
	Shop Foreman	23
	Foreman-Repairs	1
	Plant Production Foreman	1
	Total Supervisory.	25
	Sales	
	Salesman	45
	Sales Clerk	6
	Parts Salesman	2
	Farm Equipment Salesman	6
	Sales Representative	7
	Stock Control Clerk	2
	Shipping & Receiving Clerk	4
	Total Sales.	72

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Machinery Sales & Service (cont'd)	Office	
	Bookkeeper	20
	Office Secretary	4
	Office Helper	4
	Accountant	4
	Secretary-Bookkeeper	1
	Total Office.	33
	Skilled	
	Mechanic	139
	Parts Man	21
	Farm Equip. Mechanic	16
	Welder	17
	Cotton Picker Mechanic	1
	Roving Mechanic	1
	Service-Repairmen	5
	Asst. Partsman	4
	Welder-Painter	1
	Crane Operator	2
	Total Skilled.	207
	Semiskilled	
	Truck Driver	2
	Mechanic Helper	26
	Assemblyman	8
	Shop Worker	4
	Welder's Helper	4
	Setup & Deliveryman	4
	Total Semiskilled	48
	Unskilled	
	Total Unskilled	0
	Total Farm Machinery Sales and Service.	492
Farm Supplies and Equipment	Professional	
	Horticulturist	1
	Total Professional.	1
	Technical	
	Total Technical.	0
	Managerial	
	Manager	50
	General Manager	11
	Branch Manager	1
	President	4
	Secretary-Treasurer	4
	Manager-Owner	27

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Supplies and Equipment (cont'd)	Managerial (cont'd)	
	Asst. Manager	13
	Dept. Manager	1
	Office Manager	3
	Produce Manager	5
	Market Manager	6
	Vice-President	3
	Warehouse Manager	2
	District Manager	1
	Asst. Manager-Bookkeeper	2
	Manager-CoOwner-Clerk	3
	Elevator Manager	1
	Manager-Bookkeeper	1
	President-Manager	1
	Firm Manager	1
	Owner-General Manager	1
	Total Managerial.	141
	Supervisory	
	Fertilizer Superintendent	1
	Mill Foreman	1
	Mill Superintendent	1
	Yard Superintendent	1
	Shop Foreman	1
	Superintendent	1
	Plant Superintendent	2
	Production Foreman	1
	Working Foreman	2
	Asst. Foreman	1
	Crew Leader	1
	Total Supervisory.	13
	Sales	
	Salesman	22
	Sales Clerk	30
	Sales Girls	2
	Buyer	1
	Store Clerk	7
	Field Salesman & Service man	1
	Commission Agent	3
	Road Salesman	4
	Nursery Clerk	1
	Total Sales.	28
	Office	
	Bookkeeper	14
	Shipping Clerk	1
	Secretary Treasurer	1

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Supplies and Equipment (cont'd)	Office (cont'd)	
	Secretary	3
	Clerk	6
	Clerk-Secretary	1
	Posting Clerk	1
	Secretary & Bookkeeper	1
	Total Office.	28
	Skilled	
	Mechanic	2
	Serviceman	7
	Welder	2
	Small Engine Mechanic	1
	Miller	1
	Machinist	6
	Mix Operator	3
	Fork Lift Operator	3
	Packer Operator	3
	Elevator Operator	1
	Pay Load Operator	2
	Feed Mixer	4
	Total Skilled.	35
	Semiskilled	
	Produce man	1
	Service man	2
	Maintenance Man	3
	Repairman	1
	Truck Driver	70
	Warehouseman	14
	Engine Mechanics Helper	10
	Fertilizer Plant Worker	2
	Millman	5
	Elevator Helper	4
	Sewing Machine Operator	25
	Utility Man	2
	Total Semiskilled.	139
	Unskilled	
	Laborers	48
	Delivery Man	4
	Total Unskilled.	52
	Total Farm Supplies and Equipment.	480

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Livestock and Poultry	Professional	
	Total Professional. 0	
	Technical	
	Field Man 1	
	Lab. Technician 2	
	Cattle Buyer 1	
	Auctioneer 7	
	Ringman 1	
	Total Technical. 12	
	Managerial	
	Plant Manager 2	
	Management 28	
	Asst. Manager 2	
	Owner-Manager 14	
	Sales Manager 1	
	Office Manager 1	
	General Manager 3	
	Produce Manager 4	
	Market Manager 4	
	Owner-Operator 2	
	President-Manager 2	
	Field-Manager 1	
	Processor and Sales Manager 2	
	Owner-Livestock Buyer 1	
	Yard Manager 1	
	Co-Owner-Manager 4	
	Office Mgr.-Bookkeeper 1	
	Manager & Cattle Buyer 1	
	Asst. Yard Manager 1	
	Owner-Butcher 1	
	Total Managerial. 76	
	Supervisory	
	Milk Plant Superintendent 1	
	Foreman 2	
	Plant Superintendent 1	
	Route Supervisor 6	
	Plant Supervisor 1	
	Total Supervisory. 11	
	Sales	
	Salesman 11	
	Route Salesman 14	
	Sales Clerk 6	
	Routeman 4	
	Buyer 1	
	Produce Clerk 3	

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Livestock and Poultry (cont'd)	Sales (cont'd) Market Clerk Hide & Wool Buyer Total Sales.	6 3 .48
	Office Bookkeeper Office Worker Ticket Writer Receiving Clerk Clerical Help Cashier Clerk Weightmaster Total Office.	7 5 3 1 6 2 12 1 37
	Skilled Meat Cutter Processor (Beef) Butcher Pasteurizer Operator Processor (Poultry) Slaughter-Butcher Creamery Worker Butcher-Meat Cutter Short Time Operator Raw Milk Pickup Man Assorter and Inspector Total Skilled.	13 1 40 1 10 2 4 5 1 1 12 .90
	Semiskilled Plant Workers Sausage Maker Butcher's Helper Slaughterer Yardman Slaughterer, Packer & Peeler Truck Driver Delivery Man Meat Wrapper Stock Man Routeman's Helper Cattle Herder Total Semiskilled.	9 1 14 3 36 3 68 1 4 2 1 15 .157
	Total Livestock and Poultry.431

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Crops, Forestry and Soil Conservation	Professional	
	Soil Scientist	1
	Forester	5
	Agricultural Engineer	1
	Total Professional.	7
	Technical	
	Asst. Engineer	4
	Technical Expert	2
	Engineer	1
	Chemist	3
	Quality Control Man	2
	Engineer's Aid	4
	Forestry Aid	1
	Chief Engineer	1
	Surveyor	1
	Plant Engineer	22
	Total Technical.	46
	Managerial	
	Asst. Manager	11
	Elevator Manager	2
	President	2
	Production Manager	1
	Gin Manager	2
	Manager	58
	Office Manager	4
	Store Manager	1
	General Manager	8
	Plant Manager	2
	Sales Manager	6
	Produce Manager	3
	Market Manager	1
	Owner-Manager	17
	Planner Mill Manager	1
	Co-Manager & Co-Owner	1
	Warehouse Manager	4
	Grain Storage Manager	1
	Trucks Manager	1
	Fertilizer Manager	15
	Asst. Office Manager	1
	President-Manager	1
	Vice Pres.-Asst. Manager	1
	Vice Pres.-Gen. Manager	1
	Sec.-Treas. & Office Mgr.	1
	Canal Manager	4
	Drier Manager	1
	Comptroller	1
	Territorial Manager	1
	Total Managerial.	153

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Crops, Forestry & Soil Conservation (cont'd)	Supervisory Foreman Warehouse Foreman Mill Superintendent Supervisor Superintendent Logging Foreman Shed Foreman Asst. Shed Foreman Factory Superintendent Shed Supervisor Asst. Creosote Plant Supt. Dept. Superintendent Millwright Foreman Log Contractor Shop Foreman Production Foreman Production Supervisor Line Supervisor	4 2 1 3 1 1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 6 Total Supervisory. 41
Sales	Salesman Buyer Sales Clerk Sweet Potato Buyer Rice Buyer-Grader Rice Buyer	5 17 13 3 6 5 Total Sales. 49
Office	Time Keeper Clerks Chief Clerk Shipping Clerk Office Worker Bookkeeper Office & Shipping Clerk Asst. Bookkeeper Shipping Clerk Clerk & Warehouseman General Clerk Shipping and Storing Clerk	1 9 1 1 2 11 2 1 3 2 1 4 Total Office. 38

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Crops, Forestry & Soil Conservation (cont'd)	Skilled	
	Derrick Operator	4
	Sugar Roller	6
	Ginner	4
	Press Operator	1
	Butcher	3
	Mechanic	18
	Welder	3
	Electrician	8
	Presser	2
	Millwright	2
	Sawyer	5
	Maintenance Man	2
	Okra Slicer Operator	2
	Timber Marker Estimator	2
	Rice Dryer Operator	101
	Syrup Mill Operator	1
	Process Inspector	6
	Field Man (Agricultural)	18
	Head Miller	7
	Bin Man	4
	Receiver-Shipper (Rice Dryer)3	
	Total Skilled.	202
	Semiskilled	
	Maintenance Helper	1
	Log Scaler	4
	Welder Helper	1
	Mill Employee	68
	Truck Driver	40
	Feed Miller	1
	Asst. Ginner	2
	Warehouseman	19
	Utility Man	6
	Laborer	3
	Handy Man	1
	Grader-Packer	53
	Grader	38
	Tractor Driver & Loader	5
	Scaleman	1
	Operator Helper	7
	Blower	1
	Deliveryman	2
	Mill Laborer	33
	Sawman	5
	Asst. Miller	2
	Asst. Dryer Operator	2
	Packing Crew	8
	Oilers	6

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Crops, Forestry & Soil Conservation (cont'd)	Semiskilled (cont'd)	
	Miller Maintenance	1
	Canal Walkers	43
	Total Semiskilled.	353
	Unskilled	
	Warehouseman	5
	Laborer	96
	Suction Feeder	2
	Total Unskilled.	103
	Total Crops, Forestry and Soil Conservation.	992
Ornamental Horticulture	Professional	
	Entomologist	1
	Total Professional.	1
	Technical	
	Plant Propagator	1
	Total Technical.	1
	Managerial	
	Manager	10
	Asst. Manager	1
	Owner-Manager	9
	Total Managerial.	20
	Supervisory	
	Foreman	1
	Nursery Foreman	1
	Total Supervisory.	2
	Sales	
	Salesman	1
	Sales Clerk	2
	Total Sales.	3
	Office	
	Bookkeeper	1
	Total Office.	1
	Skilled	
	Floral Designer	10
	Propagator	3
	Designer	1
	Total Skilled.	20

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Ornamental Horticulture (cont'd)	Semiskilled	
	Nurseryman	3
	Tree Surgeon's Helper	3
	Total Semiskilled.	6
	Unskilled	
	Laborer	2
	Greenhouse Attendant	5
	Delivery Boy	5
	Gardener	3
	Nursery Helper	5
	Total Unskilled.	20
	Total Ornamental Horticulture.	68
Wildlife and Recreation	Professional	
	Wildlife Biologist	1
	Research & Educational Personnel	5
	Total Professional.	6
	Technical	
	Total Technical.	0
	Managerial	
	Total Managerial.	0
	Supervisory	
	Golf Course Superintendent	1
	Game Warden	3
	Total Supervisory.	4
	Sales	
	Total Sales.	0.
	Office	
	Total Office.	0
	Skilled	
	Total Skilled.	0
	Semiskilled	
	Greenskeeper	1
	Total Semiskilled.	1
	Unskilled	
	Groundskeeper	3
	Total Unskilled.	3
	Total Wildlife and Recreation.	14

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Service	Professional Asst. County Supervisor Total Professional.	1 1
	Technical Inspector Airplane Pilot Breeding Technician Pilot Advisor Total Technical.	1 8 5 26 1 41
	Managerial Manager Asst. Manager Sales Manager Branch Manager Vice-President Senior Vice-President Secretary-Treasurer President General Manager Office Manager Owner-Manager Plant Manager Credit Manager Manager-Operator Owner-Asst. Manager Total Managerial.	18 4 1 2 1 1 1 1 5 7 10 1 1 1 1 1 55
	Supervisory Supervisor Shop Foreman Asst. County Supervisor Field Man Total Supervisory.	2 4 4 3 13
	Sales Sales Purchasing Agent Total Sales.	2 1 3

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Service (cont'd)		
	Office	
	Bookkeeper	8
	Clerk	5
	Clerk-Secretary	1
	Stock Clerk	3
	Shipping Clerk	1
	Bookkeeper Sidpatcher	1
	Asst. Bookkeeper	1
	Secretary-Bookkeeper	1
	Total Office.	21
	Skilled	
	Mechanic	24
	Blacksmith	1
	Serviceman	1
	Welder	34
	Well Driller	4
	Gin Repairman	1
	Engineer	2
	Machinest Welder	5
	Total Skilled	72
	Semiskilled	
	Welder-Helper	14
	Well Driller Helper	1
	Machinist Helper	2
	Painter	1
	Canal Walker	2
	Mill Operator	1
	Welder's Helper	8
	Loader-Driver	11
	Floor Hand	15
	Mechanics Helper	3
	Total Semiskilled	58
	Unskilled	
	Delivery Man	1
	Total Unskilled	1
	Total Farm Service	

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Agricultural Service	Professional	
	Research Agronomist	6
	Vo. Ag. Teacher	18
	Veterinarian	17
	Agri. Commodity Graders	9
	Forester	8
	Home Demonstration Agent	7
	Livestock Director	1
	Agriculture Engineer	6
	County Office Manager	2
	County Agent	6
	Assoc. County Agent	12
	Soil Scientist	2
	Asst. Home Demon. Agent	5
	Animal Husbandryman	1
	Soil Conservationist	2
	Assoc. Home Demon. Agent	1
	Work Unit Conservationist	5
	Station Superintendent	1
	Construction Engineer	1
	Total Professional.	110
	Technical	
	Soil Conservation Tech.	1
	Milk Technician	2
	Conservation Technician	2
	Customer Service Rep.	1
	New Business Rep.	1
	Agri. Engineering Aid	1
	Districts Supervisor's Aid	1
	Asst. Forester	3
	Soil Conservation Aid	3
	Engineering Aid	11
	Farm Planner	1
	Field Inspector	1
	Total Technical.	28
	Managerial	
	Trust Officer	1
	President	1
	Manager	7
	Office Manager	4
	Senior Vice-President	1
	Vice-President	2
	County Office Manager	3
	District Manager	1
	Exec. Vice-President	1
	Asst. Manager	3
	Owner-Manager	3

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Agriculture Service (cont'd)	Managerial (cont'd)	
	Branch Manager	2
	Asst. Office Manager	1
	Asst. Vice-President and Agri. Rep.	1
	Total Managerial.	31
	Supervisory	
	Supervisor	1
	Farm Supervisor	2
	Service Crew Foreman	7
	County Supervisor	3
	Field Supervisor	1
	Asst. County Supervisor	2
	Milk Technical Supervisor	1
	Party Leader	4
	District Supervisor	2
	Agri. Commodity Grader Super.	1
	Asst. Farm Foreman	1
	Total Supervisory.	25
	Sales	
	Salesman	2
	Routeman	5
	Total Sales.	7
	Office	
	Secretary	15
	Note Teller	2
	Milk Plant Auditor	2
	Program Clerk	7
	Administrative Clerk	1
	Clerk	3
	Asst. Cashier	1
	Chief Clerk	5
	Bookkeeper	3
	County Office Clerk	2
	Cashier	3
	Agri. Conservation Program Clerk	5
	Sugar Clerk	1
	Allotment & Marketing Quota Clerk	3
	Office Assistant	1
	Total Office.	54
	Skilled	
	Auto Mechanic	20
	Plainometer Operator	4

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Agricultural Service (cont'd)	Skilled (cont'd)	
	Field Reporter	19
	Farm Mechanic	2
	Equipment Operator	2
	Asst. Farm Mechanic	2
	Industrial Service Operator	1
	Total Skilled.	50
	Semiskilled	
	Veterinarian Helper	5
	Veterinarian Asst.	4
	Plumber's Helper	1
	Farm Laborer	1
	Total Semiskilled.	11
	Unskilled	
	Laborer	28
	Veterinarian Hosp. Helper	1
	Janitor	1
	Total Unskilled.	30
	Total Agricultural Service.	346